ANNUAL REPORT 2021-2022

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TEZPUR UNIVERSITY A Central University

ANNUAL REPORT (2021-22)

(Approved by the *Board of Management* vide Resolution No. B.109/2022/6/2.1, dated 11.11.2022)



Specialized Knowledge Promotes Creativity

TEZPUR UNIVERSITY

Napaam, Tezpur – 784 028 Sonitpur, Assam

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(D. K. Bhattacharyya) Vice-Chancellor (Acting)



Tezpur University

(A Central University) Tezpur 784028, Assam India • Visitor's Best University Award 2016

- NIRF India Rankings 2016: 05
- Accredited with 'A+' Grade by NAAC
- THE Asia Rankings 2018: 100

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Professor D K Bhattacharyya Vice – Chancellor (Acting)

VICE-CHANCELLOR'S DESK

It is my pleasant duty to present the Annual Report of Tezpur University for the year 2021-2022. The detailed report that follows gives an account of our journey during the year, including the achievements of our students, research scholars, and members of faculty and staff. As Tezpur University completed 28 years on 21st January 2022, it is bolstered with a number of positive factors to catalyse further growth. In the year under report, i.e., 2021-2022, in spite of the adverse effects of the Covid-19 pandemic, the University could keep the academic trend on track by adopting alternative and innovative means of ICT enabled teaching-learning, holding examinations, evaluation and declaration of results on time. Classes of the intermediate and final year students were held offline from August 2021, except for the newly admitted students, whose classes were held online. Despite the adverse conditions, 1080 final semester students appeared in the Spring Semester examinations in the year 2021 and 97.59% of the students passed the examinations.

The 19th Convocation of the University was solemnised on 26th February 2022 with 1249 students graduating with B.Tech, M.Tech, M.A, M.Sc and Ph.D degrees. A total of 44 Gold Medals were awarded to the toppers of the UG and PG programmes of the year 2021 and 2 students were bestowed with the Best Graduate and Post-Graduate titles. His Excellency, the President of India, Shri Ram Nath Kovind graced the ceremony as the Chief Guest and delivered the Convocation address. His Excellency, the Governor of Assam & Chancellor of the University, Professor Jagadish Mukhi and Hon'ble Chief Minister of Assam, Dr Himanta Biswa Sarma, were also present at the ceremony and addressed the awardees.

Although the Tezpur University Entrance Examination (TUEE) could not be conducted in the year under report due to the Covid-19 pandemic, the selection and admission of candidates were completed by the best possible alternative means, except for the B.Tech, MBA and M.Sc. in Molecular Biology and Biotechnology programmes. Out of the 17644 applications received for various academic programmes, 1601 were admitted following the Govt. of India guidelines for reservation of seats for various categories. It is noteworthy that 46.33% of the admitted students were female. Being a residential institution, the students are all accommodated in the designated hostels for boys and girls.

After the admission process was completed, the total strength of students in the University stood at 4597 (as of December 2021) and the percentages of reserved category students were 24.79% (OBC-NCL), 11.16% (SC), 7.31% (ST), 5.57% (EWS) and 0.95% (PWD). The total number of foreign students in the University was 13. A total of 81.02% of the students were from the state of Assam, while 18.69% of students were from the rest of the country and abroad.

Many essential facilities have been made available on the campus for our students, faculty members and staff. The sports, games, cultural centres and other facilities, like gymnasium and yoga centres, provide ample scope for co-curricular activities to our students. The University Health Centre has been providing essential medical support to everyone residing on the campus. A good number of shopping complexes, cafeterias, banks, ATMs and a post office are located strategically across the campus for the convenience of its inhabitants.

As in the previous years, the University gave a special emphasis on research and development activities. During the year under report, 26 new projects were sanctioned making the number of externally funded ongoing projects 209 with a financial outlay of INR 7432.53 lakhs plus €105428.75 and £31,500. The ongoing research projects include 15 international collaborative projects. The University also earned approximately INR 2,06,36,080/- through consultancy projects during 2021-22.

Our students performed well in Academic, Co-curricular and Extension activities during the year. Around 238 students cleared NET/GATE/SET/SLET and other competitive examinations during the period. Furthermore, the students displayed their talents at various Zonal/State and National level tournaments/competitions.

Tezpur University, known for its state-of-the-art infrastructure, saw the creation and upgradation of a number of facilities in the year 2021-2022. These included the renovation of Academic Building No. I & II, and repairing and restoration of the damaged portions of the boundary wall among others. A new girls' hostel (named Jiri Women Hostel) with a capacity of 180 boarders has been constructed and made available. The University has also started 09 numbers of building projects, including Academic Buildings & Hostels under HEFA funding for INR 153.71 cr. The RFID system has been installed and made operational in the Central Library for better automation and surveillance. One of the key features of Tezpur University is the extensive use of solar power on campus. The 1MW capacity rooftop Solar Panels installed at various locations on the campus has resulted in a considerable reduction in the electricity bill paid by the University. A 40-capacity hostel has also been approved by AICTE under the CAFES scheme, the tendering process of which has been completed and the award of contract is in the final stage.

Over the years, Tezpur University has thrived to establish itself as one of the premier and sought-after higher educational institutions in the country. The University is determined to create an inclusive environment for its stakeholders and to create a modern centre of higher education and research in spite of the adverse challenges presented before it by the Covid-19 pandemic.

I thank the Annual Report committee for preparing this important document in both English and Hindi.

Charlactar

(D. K. Bhattacharyya) Vice-Chancellor (Acting)

Date: 24.11.2022 *Place*: Tezpur

GIST OF THE ANNUAL REPORT 2021-22

University Profile

| Name of the University State Address Year of Establishment Type of University | : | Tezpur University Assam Napam, Tezpur, District-Sonitpur, Assam-784028, INDIA 1994 Central and Unitary |
|---|---|--|
| Type of University | | Central and Unitary |

| Vice-Chancellor | : Professor Vinod Kumar Jain |
|---------------------|--|
| Pro Vice-Chancellor | : Professor Dhruba Kumar Bhattacharyya |
| Registrar | : Dr. Biren Das |

Highlights of the Year

| inglinghts of the Tear | |
|---|------------------------------|
| Academic Departments | : 27 |
| Academic Centres | : 12 |
| Academic Programmes | : 73 |
| Students | : 4597 |
| Female Students | : 2130 |
| Male Students | : 2467 |
| International Students | : 13 |
| Teachers | : 273 |
| Female teachers | : 74 |
| Male teachers | : 199 |
| Teachers (General) | : 145 |
| Teachers (SC/ST/OBC) | : 128 |
| Non-teaching employees | : 267 |
| Female employees | : 32 |
| Male employees | : 235 |
| Non-teaching employees (General) | : 105 |
| Non-teaching employees (SC/ST/OBC) | : 162 |
| Total Departments under UGC-SAP DRS I | : NIL |
| Total Departments under UGC-SAP DRS II | : 03 |
| Total Departments under DST-FIST | : 07 |
| Departments under Centre of Excellence | : 01 |
| Sponsored ongoing projects | : 209 |
| New projects sanctioned | : 26 |
| International collaborative research projects Ongoing) | : 15 |
| Total amount earned through consultancy projects | : ₹2.06 cr |
| Journal paper published | : 492 |
| <i>h-index</i> | : 94 (Web of Science) |
| Book chapters authored | : 146 |
| Books authored | : 35 |
| Seminar/Workshops organized by various Departments/Centres | : 101 |
| Total number of students qualified NET, SLET, GATE, TET, AIBE | : 238 |
| (Indicative) | |
| Patents | : 9 (Published-5, Granted-3) |
| | |

STATISTICS OF THE YEAR

Employees (Teaching)

| Category | Present as on 01-04-2021 | Joined during 2021 – 2022 | Left during 2021 – 2022 | Present as on 31-03-2022 |
|---------------------|--------------------------|------------------------------|----------------------------|--------------------------|
| Professor | 77 | 6 | 0 | 83 |
| Associate Professor | 36 | 3 | 7 | 32 |
| Assistant Professor | 148 | 13 | 3 | 158 |
| Total | 261 | 22 | 10 | 273 |

Employees (Non-Teaching)

| Category | Present as on 01-04-2021 | Joined during 2021 – 2022 | Left during 2021 – 2022 | Present as on 31-03-2022 |
|---------------|--------------------------|------------------------------|----------------------------|--------------------------|
| Group-A | 35 | 1 | 2 | 34 |
| Group-B | 56 | 0 | 0 | 56 |
| Group-C | 108 | 0 | 3 | 105 |
| Group-C (MTS) | 71 | 2 | 1 | 72 |
| Total | 270 | 3 | 6 | 267 |

SC/ST and Female/Male Employees (Teaching)

| Category | SC | OBC | ST | Gen | Female | Male | Total |
|---------------------|----|-----|----|-----|--------|------|-------|
| Professor | 9 | 18 | 5 | 51 | 14 | 69 | 83 |
| Associate Professor | 3 | 6 | 3 | 20 | 5 | 27 | 32 |
| Assistant Professor | 26 | 44 | 14 | 74 | 55 | 103 | 158 |
| Total | 38 | 68 | 22 | 145 | 74 | 199 | 273 |

SC/ST and Female/Male Employees (Non-Teaching)

| Category | SC | OBC | ST | Gen | Female | Male | Total |
|---------------|----|-----|----|-----|--------|------|-------|
| Group-A | 5 | 9 | 3 | 17 | 3 | 31 | 34 |
| Group-B | 9 | 19 | 5 | 23 | 10 | 46 | 56 |
| Group-C | 19 | 40 | 12 | 34 | 15 | 90 | 105 |
| Group-C (MTS) | 12 | 24 | 5 | 31 | 4 | 68 | 72 |
| Total | 45 | 92 | 25 | 105 | 32 | 235 | 267 |

Students

| | | | - 2 |
|---|----------|--------|--------|
| 4597 Male Female Male Female Male Female Male Female Male | e Female | e Male | Female |
| ⁴³⁹⁷ 2467 2130 1343 1233 289 221 170 165 639 | 496 | 29 | 15 |

*PWD candidates are included in the Table as per their category. So, it is to be counted separately

OVERVIEW OF TEZPUR UNIVERSITY

Tezpur University established on 21st January 1994 by an Act of Parliament of India, completed 28 years on 21st January 2022. The University, which started with only 57 students in 03 Departments, has transformed into a prestigious Higher Educational Institution and is swiftly emerging as one of the most sought-after universities in the eastern region of India for quality Higher Education.

To attain outstanding research, innovation and excellence in teaching and learning, the academic programmes offered at the University have a distinct focus on science, technology, management, humanities and social sciences, reflecting the mandated objects of the University. During the year reported (2021-22), students were admitted to 73 different programmes of study in 27 Departments. Classes of newly admitted students in the Academic session 2021-22 were conducted in online mode with a delay of a few days because of the Covid-19 pandemic. Classes of the Intermediate and final year students were held in offline mode from August 2021. The University also offered 06 programmes under ODL mode during the year reported. The University offered Academic programmes of study at the Under-Graduate (Degree/Diploma/Certificate), Integrated, Post-Graduate (Degree/Diploma) and Doctoral levels in four schools, viz. School of Engineering, School of Humanities & Social Sciences, School of Sciences and School of Management Sciences. The selection of candidates for admission was on a merit basis as the Tezpur University Entrance Examination (TUEE) could not be conducted due to the pandemic. The students in UG/PG programmes (except in B.Tech, MBA, M.Sc. in Molecular Biology and Biotechnology) were admitted provisionally considering the marks of the prefinal semester of qualifying examinations subject to the condition that they would submit the requisite pass certificates in subsequent months.

A total of 17644 applications were received through online mode for various programmes of studies. The number of candidates admitted to various programmes was 1601, of which 46.33% were female students. The University reserved seats for the OBC (NCL), SC, ST, EWS and PWD categories as per the Govt. of India rules. Twelve students were admitted under Defence Quota as per Govt. of India policy and 02 international students were admitted through ICCR sponsorship. The total number of foreign students on campus during this period was 13.

The 19th Convocation of Tezpur University was held on 26th February 2022 and His Excellency President of India, Shri Ram Nath Kovind, graced the ceremony as the chief guest and delivered his Convocation address. His Excellency Governor of Assam & Chancellor of the University, Shri Jagadish Mukhi and Hon'able Chief Minister of Assam, Dr Himanta Biswa Sarma, were also present at the ceremony and addressed the awardees. A total of 1249 students were eligible to receive their degrees and diplomas in the 19th Convocation. 10 Gold Medals were delivered to toppers of the year 2021 and 36 Gold Medals were awarded to other toppers of UG and PG programmes. The pass percentage of students in the latest completed academic year is 97.5%.

Tezpur University has a heterogenous pool of faculties from all over India. Currently, 66.9% faculties of Tezpur University are from Assam and 33.1% are from the rest of the country, of which 27% are female. The average percentage of full-time teachers with Ph.D./D.Sc. during the last five years is 91.08%.

Tezpur University has 136 ICT Enabled Classrooms, 17 Smart Classrooms, 46 Teaching Labs, 7 Teaching cum Research Labs, 33 Seminar Halls, 2 Audio-Visual Studios, 2 Audio Studios and 1 Video Lecture Recording Facility. The entire Tezpur University campus is wi-fi enabled and the available bandwidth of Internet connection through the National Knowledge Network (NKN) is 1 Gbps. The student-to-computer ratio in the University is 5.5:1. The Tezpur University Central Library has 1,25,576

nos print collections (books, back volumes, journals etc) and 14,440 nos e-resources (e-books, e-journals, online databases etc). There are 5 Reading Rooms of 700 capacity and 1 Digital Resource Centre of 42 capacity in the Central Library.

The University offers several pivotal amenities to the students, fraternity and other campus dwellers at a stonecast distance. A good number of shopping complexes and cafeterias are located strategically across the campus for the convenience of its inhabitants. Among others, Essential, Cafeteria, Shopping Complex, SOE Dhaba and Amenity are a few. The University also provides daily bus service for commuters and visitors to and from Tezpur town at regular intervals. The University campus also houses a pre-primary school named Takshashila Vidyapeeth that provides pre-primary education to the children of campus dwellers as well as the people staying around the University. The school, Kendriya Vidyalaya No. 4, located inside the Tezpur University campus provides primary and secondary level education to students amidst the sylvan and lush green environment of Tezpur University.

The University facilitated the establishment of a Yoga Centre in 2010 for an 'add on course' for students. In addition, currently, the Centre provides daily practice sessions in the morning in a blended mode for the campus dwellers as well as people from the nearby villages. Tezpur University has regional branches of two national banks namely State Bank of India and Panjab National Bank inside the campus. Two State Bank of India ATMs and one Axis Bank ATM are located at three judicious locations inside the campus. The University campus also offers a Post Office, a Health Centre with three residential Medical Officers, a state-of-the-art 816 sitting capacity auditorium named Kalaguru Bishnuprasad Rabha (KBR) Auditorium, a 180 sitting capacity Council Hall, a Community Hall and a Chandra Prabha Saikiani Bhawan for music and drama practice for the inhabitants. The students and fraternity can also enjoy modern sports infrastructures such as an indoor badminton stadium, two basketball courts, two tennis courts, two volleyball courts, a 23,800 sq m cricket cum football field with floodlights facility, a 2,442 sq m swimming pool and a high-end gymnasium with world-class Weider and Afton products.

The Tezpur University campus shelters the students in 7 boys' hotels and 9 girls' hostels. The married students of Tezpur University are accommodated in the Scholar's Hostel on the campus. The campus offers residential quarters to the employees of the University. The state-of-the-art Guest House of the University has well furnished rooms, a 30-seater Conference Room, a 40-seater Dining Hall and a 24-hour internet connection. The 13,125 sq. m Botanical Garden within the University campus has about 300 nos of different plant species and attracts school and college excursions all year round. Tezpur University campus also offers hospitality to VIP and VVIP guests at a VIP guest house named Niribili situated within the premises of the Vice-Chancellor's residence. Great personalities like the Presidents of India and top national and international scientists have stayed at Niribili. The University has 109 Home Guards and 44 lady security guards who keep the inhabitants safe 24x7.

A total of 25 high-end instruments are currently housed and maintained by the Sophisticated Analytical Instrumentation Centre (SAIC) to cater for the instrumental analytical needs of researchers. Apart from Tezpur University researchers, people from other institutions and industries within the north-east region and beyond are also allowed to use these facilities. The instruments housed by SAIC include a Transmission electron Microscope (TEM), Scanning Electron microscope (SEM), Raman Spectrometer and Bomb calorimeter.

The faculty members received several project grants from various national and international agencies including UGC, DST, DBT, MeitY, MoEF&CC, NEC, AICTE, DAE, DRDO, ISRO, ICMR, ICAR, CSIR, UNICEF and others. At present, a total of 209 externally funded research projects are ongoing with a financial outlay of INR 7432.53 lakhs plus €105428.75 and £31,500. The IPR Cell of the University constantly encouraged and guided researchers in filing nine patents and publishing five in the

mentioned year. During this time, three patents were granted to Pritam Deb and Kasmiri Deka for 'Nanocatalyst for bio-oil production', Brijesh Srivastava, Baby Z. Hmar and Dipsikha Kalita for 'A process for manufacturing turmeric powder from raw turmeric rhizomes' and Pritam Deb, Kakoli Bhattacharya and Devaborniny Parasar for 'Mesoporous secondary nanostructures as multifunctional heavy metal scavenger'. Four technologies were also transferred to three private companies working in the fields of food technology and water purification.

The students and faculty members continued their good work by bringing laurels to the University. Prof. D. K. Bhattacharyya of the Dept. of Computer Science and Engineering was included in the list of Top 2% Scientists in the Globe, published by Stanford University Professors in the PLOS Journal. Prof. Niranjan Karak of the Dept. of Chemistry was listed among the top world scientists in AD Scientific Index. Prof. Partha Pratim Dutta was nominated as Professional Honorary Member (ISES: Germany): in 2021-2022. Dr Anushabda of the Dept. of Hindi was awarded the Hindi Bharati Samman 2021 by Vishwa Hindi Sahitya Parishad, Delhi. Dr Biplob Sarkar of the Dept. of Applied Sciences received a Life Membership of the Astronomical Society of India. An industrial design was also granted to the University on 'Prosthetic hand' developed by Prof. Nayan Moni Kakoty of the Dept. of Electronics and Communication Engineering.

Our students during the mentioned period performed well in Academic, Co-curricular and Extension activities. Around 238 students cleared NET/GATE/SET/SLET and other competitive exams during the period. The students displayed their talents at various Zonal/State and National level tournaments/competitions.

In the NIRF ranking, the University maintained a healthy position among the top Higher Educational Institutions in India. The University ranked 73 (Overall) and 46 among universities in the 2021 rankings. On the global stage, the University featured in the 1001-1200 position in Times Higher Education (THE) University Rankings in 2021.

The University completed several building projects in the year 2021-22. These include the renovation of Academic Building No. I & II, repairing and restoration of the damaged portion of the boundary wall, boring of 02 nos deep tube wells for central water supply scheme among others. Besides these, the University has also started 09 nos of building projects which includes Academic Buildings & Hostels under HEFA funding for INR 153.71 cr.

In terms of other activities like extension and outreach, skill development efforts, placement reports, achievements, etc. carried out by the University and its brief accounts have been reported in different sections of this annual report.

STATUTORY BODY: BOARD OF MANAGEMENT

| Name/ Designation | Position | Note |
|---|----------------------|-------------------------|
| Vice-Chancellor | Chairman | |
| Pro Vice Chancellor | Member | |
| Dr. A Nath, Assistant Professor, Dept. of Chemistry, GC | Member | Till 09-03-2022 |
| College, Silchar, Assam | | |
| Shri O R Shallam, Professor & Head (Retd.), Dept. of | Member | Till 09-03-2022 |
| History, KNG College, Jowai, Meghalaya | | |
| Shri B S Nanda, Associate Professor, Dept. of Political | Member | Till 09-03-2022 |
| Science, Charuchandra College, Kolkata, West Bengal | | |
| Dr. T David Singh, Associate Professor, Dept. of | Member | |
| Chemistry, Dept. of Basic Science and Humanities, NIT | | |
| Manipur, Imphal | | |
| Prof. Pradip Lingfa, Dept. of Mechanical Engineering, | Member | w.e.f. 10-03-2022 |
| NERIST, Itanagar, Arunachal Pradesh | | |
| Prof. Sudeshna Bhattacharjya, Department of Sanskrit, | Member | w.e.f. 10-03-2022 |
| Gauhati University, Guwahati | | |
| Dr. Milan Rani Jamatiya, Associate Professor, Dept. of | Member | w.e.f. 10-03-2022 |
| Hindi, Tripura University, Agartala | | |
| Dr. Joyanti Chutia, Former Director, IASST, Guwahati | Member | |
| Prof. P. K. Das, Dean, School of Humanities & Social | Member | Till 31-12-2021 |
| Sciences | | |
| Prof. Papori Baruah, Dean, School of Management | Member | w.e.f. 03-01-2022 |
| Sciences | | |
| Prof. M. K. Sarma, Dept. of Business Administration | Member | |
| Dr. Madhurima Goswami, Dept. of Cultural Studies | Member | T :11 05 01 0000 |
| Dr. Heera Barpujary, Dept. of Business Administration | Member | Till 05-01-2022 |
| Shri Rathijit Chakraborty, Dept. of Foreign Languages | Member | w.e.f. 12-01-2022 |
| Alumni Representatives | | |
| Dr. Barnali Das Deka, Tezpur, Assam | Special Invitee | |
| Dr. Dharma Saikia, Guwahati, Assam | Special Invitee | |
| Student Representatives | · · · | · |
| Mr. Raktim Aabha Saikia, Research Scholar | Special Invitee | Till 08-06-2021 |
| Mr. Jyotishpal Deka, President, TUSC | Special Invitee | Till 08-06-2021 |
| Ms. Aarati Singh, Research Scholar | Special Invitee | Till 09-06-2021 |
| Ms. Smitakshi Goswami, PG Student | Special Invitee | Till 09-06-2021 |
| | ^ | |
| Finance Officer | Permanent Invitee | |
| Controller of Examinations | Permanent Invitee | |
| Registrar | Ex officio Secretary | |

STATUTORY BODY: PLANNING BOARD

| Name/ Designation | Position | Note |
|--|----------------------|-------------------|
| Vice-Chancellor | Ex-Officio Chairman | |
| Pro Vice Chancellor | Ex-Officio Member | |
| Dean, School of Humanities and Social Sciences | Ex-Officio Member | |
| Dean, School of Sciences | Ex-Officio Member | |
| Dean, School of Management Sciences | Ex-Officio Member | |
| Dean, School of Engineering | Ex-Officio Member | |
| Dean, Students' welfare | Ex-Officio Member | |
| Dean, Research and Development | Ex-Officio Member | |
| Dean, Planning & Development | Ex-Officio Member | |
| Dean, Academic Affairs | Special Invitee | |
| Six Teachers Nominated by the Academic Council | | 1 |
| Prof Chandan Kumar Sarma, Dept. of Sociology | Member | |
| | Member | Till 07-04-2021 |
| Prof. M. K. Sarma, Dept. of Business Administration Dr. P. Anbarasan, Dept. of Mass Communication & | Member | 111107-04-2021 |
| Journalism | Wiember | |
| Dr. T. R. Sarma, Dept. of Business Administration | Member | |
| * | Member | |
| Dr. S. I. Singh, Dept. of Computer Science & Engineering | Member | |
| | Member | w.e.f. 06-05-2021 |
| Prof. D. K. Saikia, Dept. of Computer Science & Engineering | wiember | w.e.1. 00-03-2021 |
| Prof. Chandana Goswami, Dept. of Business | Member | w.e.f. 06-05-2021 |
| Administration | Wiember | w.c.i. 00-05-2021 |
| | | |
| One Representative of Ministry of Education | 1 | 1 |
| Joint Secretary (Central University), Ministry of | Member | |
| Education, Dept. of Higher Education, New Delhi | | |
| One Representative of UGC | | |
| Prof. S. B. Agrawal, Dept. of Botany, Faculty of Science, | Member | |
| Banaras Hindu University, Varanasi, Uttar Pradesh | | |
| One Representative of NEC | | 1 |
| Director (HRD & E), NEC, Nongrim Hill, Shillong- | Member | |
| 793003 | Wichioci | |
| | | |
| One Representative of State Govt. of Assam | | |
| Commissioner and Secretary, Dept. of Higher Education, | Member | |
| Govt. of Assam, Dispur, Guwahati-781006 | | |
| Two Nominees by the Board of Management | | |
| Prof. Sashindra K. Kakoti, Dept. of Mechanical | Member | |
| Engineering, IIT Guwahati, Guwahati – 781 039 | | |
| Prof. Mohan Ch. Kalita, Dept. of Biotechnology, Gauhati | Member | |
| University, Guwahati – 781 014 | | |
| | | |
| Controller of Examinations | Permanent Invitee | |
| Finance Officer | Permanent Invitee | |
| Librarian | Permanent Invitee | |
| Registrar | Ex-officio Secretary | |

STATUTORY BODY: ACADEMIC COUNCIL

| Name/ Designation | Position | Note |
|--|---------------------|-------------------|
| Vice Chancellor | Ex-officio Chairman | |
| Pro Vice Chancellor | Ex-officio Member | |
| Deans of Schools | | |
| Dean, School of Management Sciences | Ex officio Member | |
| Dean, School of Humanities and Social Sciences | Ex officio Member | |
| Dean, School of Engineering | Ex officio Member | |
| Dean, School of Sciences | Ex officio Member | |
| Dean, Students' Welfare | Ex officio Member | |
| Dean, Research and Development | Special Invitee | |
| Dean, Academic Affairs | Special Invitee | |
| All Heads of Departments / Centres | | |
| Head, Department of English | Ex officio Member | |
| Head, Department of Foreign Languages | Ex officio Member | |
| Head, Department of Cultural Studies | Ex officio Member | |
| Head, Department of Sociology | Ex officio Member | |
| Head, Department of Mass Communication and | Ex officio Member | |
| Journalism | | |
| Head, Department of Education | Ex officio Member | |
| Head, Department of Social Work | Ex officio Member | |
| Head, Department of Hindi | Ex officio Member | |
| Head, Department of Law | Ex officio Member | |
| Head, Department of Assamese | Ex officio Member | |
| Head, Department of Business Administration | Ex officio Member | |
| Head, Department of Commerce | Ex officio Member | |
| Head, Department of Mathematical Sciences | Ex officio Member | |
| Head, Department of Physics | Ex officio Member | |
| Head, Department of Chemical Sciences | Ex officio Member | |
| Head, Department of Molecular Biology and | Ex officio Member | |
| Biotechnology | | |
| Head, Department of Environmental Science | Ex officio Member | |
| Head, Department of Computer Science and Engineering | Ex officio Member | |
| Head, Department of Electronics & Communication | Ex officio Member | |
| Engineering | | |
| Head, Department of Food Engineering & Technology | Ex officio Member | |
| Head, Department of Energy | Ex officio Member | |
| Head, Department of Mechanical Engineering | Ex officio Member | |
| Head, Department of Civil Engineering | Ex officio Member | |
| Head, Department of Electrical Engineering | Ex officio Member | |
| Head, Department of Design | Ex officio Member | |
| Head, Department of Applied Sciences | Ex officio Member | |
| Head, Computer Centre | Ex officio Member | |
| Head, Centre for Disaster Management | Ex officio Member | |
| Head, Women Studies Centre | Ex officio Member | |
| Head, Centre for Online and Distance Education | Ex officio Member | |
| Head, Centre for Inclusive Development | Ex officio Member | |
| Two Professors nominated by the Vice Chancellor | 1 | |
| Prof. Tarun K Maji, Dept. of Chemical Sciences | Member | Till 29-06-2021 |
| Prof. C. L. Mahanta, Dept. of Food Engineering & | Member | w.e.f. 30-06-2021 |

| Technology | | |
|---|----------------------|-------------------|
| Prof. B. Konwar, Dept. of Molecular Biology and | Member | |
| Biotechnology | | |
| Two Associate Professors Nominated by the Vice Chan | cellor | |
| Dr. Dambarudhar Mohanta, Dept. of physics | Member | |
| Bhim Pd. Sarmah, Dept. of Mathematical Sciences | Member | |
| Two Assistant Professors Nominated by the Vice Chan | cellor | |
| Dr. Riku Chutia, Dept. of Electronics and | Member | |
| Communication Engineering | | |
| Dr. Reetamoni Narzary, Dept. of English | Member | |
| Three Nominees of the Board of Management | | |
| Prof. N. C. Talukdar, Former Director, IASST, Guwahati, | Member | |
| Assam | | |
| Prof. Desmond L Kharmawphlang, Dept. of Culture & | Member | Till 28-10-2021 |
| Creative Studies, North-Eastern Hill University (NEHU) | | |
| Umshing Mawkynroh, Shillong 793022, Meghalaya | | |
| Prof. Anup Kumar Gogoi, Dept. of Electronics and | Member | Till 28-10-2021 |
| Electrical Engineering (EEE), IIT Guwahati, Guwahati – | | |
| 781039, Assam | | |
| Prof. Gautam Baruah, Director, IIIT Guwahati, Guwahati, | Member | w.e.f. 29-10-2021 |
| Assam | | |
| Prof. Ajanta Buragohain Rajkonwar, Vice – Chancellor, | Member | w.e.f. 29-10-2021 |
| Assam Women's University, Jorhat, Assam | | |
| One Representative of UGC | 1 | |
| Prof. Madhoolika Agrawal, Fellow of National Academy | Member | |
| of Sciences, CAS Department of Botany, Banaras Hindu | | |
| University, Varanasi, Uttar Pradesh | | |
| One Representative of Ministry of Education | 1 | |
| Vacant | | |
| One Representative of NEC | | |
| Director (HRD & E), North Eastern Council (NEC), | Member | |
| Shillong-793003 | | |
| One Representative of State Govt. of Assam | | |
| Commissioner & Secretary / Principal Secretary In- | Ex-officio member | |
| charge, Department of Higher Education, Govt. of | | |
| Assam, Guwahati-781006 | | |
| | | |
| Controller of Examinations | Ex-officio Member | |
| Librarian | Ex-officio Member | |
| Registrar | Ex-officio Secretary | |

STATUTORY BODY: FINANCE COMMITTEE

| Name/ Designation | Position | Note |
|---|----------------------|-------------------|
| Vice Chancellor | Chairman | |
| Pro Vice-Chancellor | Member | |
| Joint Secretary and Financial Advisor, MoE, or his/her | Member | |
| nominee from Finance Bureau of MoE Not below the | | |
| rank of Deputy Secretary | | |
| Joint Secretary (CU&L) of MoE, or his/her nominee not | Member | |
| below the rank of Joint Secretary to the Govt. of India | | |
| Joint Secretary (CU), UGC or any other Joint Secretary | Member | |
| level officer nominated by the Chairman, UGC | | |
| Mr. S Vasum, IAAS, Deputy Controller & Auditor | Member | |
| General of India (Retired), Dimapur, Nagaland | | |
| Shri B. Paul Muktiah, Chairman and Managing Director, | Member | Till 22-07-2021 |
| North Eastern Development Finance Corporation ltd., | | |
| NEDFi House, Dispur, Guwahati – 781 006 | | |
| Prof. Ramesh Kumar Pandy, Vice Chancellor, Shri Lal | Member | w.e.f. 23-07-2021 |
| Bahadur Shastri National Sanskrit University, New Delhi | | |
| - 110016 | | |
| Prof. M. K. Sarma, Department of Business | Member | |
| Administration | | |
| Finance Officer | Ex officio Secretary | |

STATUTORY BODY: BUILDING COMMITTEE

| Name/ Designation | Position | Note |
|--|---------------------|------|
| Vice Chancellor | Ex officio Chairman | |
| Pro Vice Chancellor | Member | |
| Prof. S. K. Sinha, Dean, School of Engineering | Member | |
| Prof. Utpal Kumar Das, Dean Planning & Development | Member | |
| Prof Utpal Sarma, Department of Computer Science & | Member | |
| Engineering | | |
| Prof. R. R. Hoque, Department of Environmental Science | Member | |
| Finance Officer | Ex officio Member | |
| Head, Department of Civil Engineering | Ex officio Member | |
| Chief Engineer, PWD (Bld), Assam, or his/her nominee | Ex officio Member | |
| who is not below the rank of Supdt. Engineer | | |
| Er. Alok Ranjan Borah, Superintendent Engineer (Retd) | Member | |
| Superintendent Engineer (Electric), PWD (Elect), | Ex officio Member | |
| Guwahati Electric Division Guwahati, Assam | | |
| Superintendent Engineer (PHE), Tezpur Circle, Assam | Ex officio Member | |
| Executive Engineer, Tezpur University | Ex officio Member | |
| Shri Amal Barman, Deputy Director, Office of the Chief | Member | |
| Engineer (Bldg), Guwahati, Assam | | |
| Mr. D Saikia, Sr. Architect, PWD, Assam | Member | |
| Assistant Horticulturist, Tezpur University | Ex officio Member | |
| Registrar, Tezpur University | Ex officio Member | |
| | Secretary | |

GENERAL ADMINISTRATION

About the General Administration

General Administration of the University looks after the entire administrative works of the University. The section is comprised of HR, Establishment, Store & Purchase, Receipt & Dispatch etc. The section provides all administrative support to the Academic Departments, Centres, Cells of the University for better performance. Various Statutory Bodies' meetings are coordinated by the General Administration section. It also organizes various/occasional programmes in the University. All correspondence with Ministry of Education, University Grants Commission, State Government and all other Institutes are coordinated by the section. All internal Notifications, Orders and Circulars etc. are also issued from this section. This section also deals with RTI matters and Official Language Implementation. All correspondence for organizing various programmes like Seminars, Workshops by various Departments, Centres and Cells are routed through General Administration Section. The section is responsible for proper implementation of various Guidelines issued by the Ministry of Education and University Grants Commission from time to time. Establishment Section looks after all the recruitment related matters and service related matters of Teaching and Non-Teaching Employees of the University, including promotions. This section also organizes in-house Training / Orientation Programs for the Non-Teaching Employees of the University. The Store & Purchase Section looks after the Purchase and Store related matters for the entire University. All media and Public related works are done by PRIO who is attached with General Administration Section.

| Designation | Name | Highest | <email></email> | Date of holding |
|----------------------|------------------------|---------------|-----------------|-----------------|
| | | Qualification | @tezu.ernet.in | the current |
| | | (Institute) | | position |
| Vice-Chancellor | Prof. Vinod Kumar Jain | D.Phil | vc | 22/02/2018 |
| Secretary to VC | Arun Bhagawati | MA | secretariat | 12/06/2017 |
| Lower Division Clerk | Bitopan Mazumdar | M.Com | b2pan94 | 23/02/2021 |
| Driver | Debojit Saikia | Class X | debo345 | 14/02/2018 |
| Multi-Tasking Staff | Umesh Roy | Class VIII | umesh | 06/03/2018 |
| | Kishor Basfor | Class II | kishor | 01/01/2006 |
| | Hiteshwar Hazarika | HSSLC | hites | 24/05/2017 |
| | Nakul Deka | Class IX | nakuld | 01/06/2008 |

Pro-VC's Office: Officers and Staff Members

| Designation | Name | Highest | <email></email> | Date of holding |
|--------------|----------------------------------|---------------|-----------------|-----------------|
| | | Qualification | @tezu.ernet.in | the current |
| | | (Institute) | | position |
| Pro VC | Prof. Dhruba Kumar Bhattacharyya | PhD | pvc | 01/04/2021 |
| Stenographer | Baby Newar | MA | baby | 13/06/2018 |
| Driver | Moloy Das | Class IX | moloy | 01/01/2021 |
| MTS | Kanak Das | Nil | kanak | 14/06/2018 |

Registrar's Office: Officers and Staff Members

| Designation | Name | Highest Qualification | <email> @tezu.ernet.in</email> | |
|-------------|-----------|--------------------------|------------------------------------|------------|
| | | (Institute) | | position |
| Registrar | Biren Das | PhD | registrartu | 22/07/2013 |

| Joint Registrar | Hridoy Saikia | MBA | hridoy | 29/03/2016 |
|-----------------|---------------------|----------|----------|------------|
| UDC | Bidisha Baishya | M.Com | bidisha | 28/02/2020 |
| Driver | Joy Chandra Singha | Class IX | | 01/01/2021 |
| MTS | Hemanta Kumar Gogoi | HSLC | hemantag | 15/10/2014 |

Establishment Section: Officers and Staff Members

| Designation | Name | Highest | <email></email> | Date of holding |
|-----------------------------------|-------------------------|---------------|-----------------|-----------------|
| | | Qualification | @tezu.ernet.in | the current |
| | | (Institute) | | position |
| Assistant Registrar (Officiating) | Deba Kumar Bharali | BSc | dkrb | 07/04/2022 |
| | Debojyoti Dutta | BA | djd | 24/01/2018 |
| | Mohan Bahadur Sewa | B.Com | mbs | 17/10/2012 |
| Section Officer | Jinu Keot | MA | jinu | 02/07/2014 |
| | Partha Pratim Choudhury | BA | parpc | 01/04/2010 |
| | Anupal Das | BSc | baap | 07/04/2022 |
| | Bornalee Das | MA | blee_sb | 10/09/2013 |
| | Anupam Das | MA | anupamd | 08/06/2015 |
| UDC | Bhrigu Das | MA | bhrigu | 21/10/2020 |
| | Bhaskar Bhattarai | MA | bhattarai | 09/11/2020 |
| Stenographer | Mridula Das | BA | mridulad | 24/06/2013 |
| | Gambhir Bahadur Chetry | Class IX | gambhir | 22/03/2017 |
| MTS | Anjan Baruah | Class IX | Anjan123 | 30/11/2021 |
| | Kumud Hajwari | HSLC | kajwari | 01/12/2015 |

General Administration: Officers and Staff Members

| Designation | Name | Highest Qualification (Institute) | <email> @tezu.ernet.in</email> | Date of holding the current position |
|---|---|---|------------------------------------|--|
| Assistant Director (Official Language) | Kul Prasad Upadhyay | PhD | kul | 29/06/2012 |
| Security Officer | Nalini Kanta Sarmah (Retd. Supdt. of Police) | BSc | nalini | 01/10/2012 |
| Public Relations & Information Officer | Samaresh Barman | MA | samaresh/prio | 01/12/2016 |
| Section Officer (SC/ST Cell) | Samar Kakati | B.Com | sk | 02/03/2020 |
| Junior Translation Officer | Rekha Rani Bezbaruah | MA, B.Ed | rekharb | 01/04/2013 |
| Hindi Typist | Simimoyee Devi | MA | simi | 02/03/2020 |
| Driver | Tilak Chandra Das | Class VI | tilakd | 21/10/2019 |
| MTC | Puspa Kanta Chetry | HSLC | puspakt | 20/08/2018 |
| MTS | Rekha Das | HSLC | rekha2 | 16/09/2019 |

Store and Purchase Section: Officers and Staff Members

| Designation | Name | Highest Qualification | <email> @tezu.ernet.in</email> | |
|---------------------|---------------|--------------------------|------------------------------------|------------|
| | | (Institute) | | position |
| Assistant Registrar | Upakul Sarmah | PhD | upakul | 02/06/2014 |

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| Section Officer | Pranjal Kumar Borah | BA | poll | 01/01/2018 |
|-----------------|---------------------|-----------|---------|------------|
| Assistant | Santonu Sarmah | BSc, B.Ed | santonu | 09/06/2020 |
| MTS | Samojit Nath | MA | samojit | 20/09/2018 |
| | Santosh Chetri | HSLC | santosh | 30/12/2020 |
| | Bhupen Basumatari | Class X | bhupenb | 21/03/2017 |

FINANCE SECTION

The Annual Accounts of the University are maintained in five parts: Part-I deals with Recurring and Salary Funds, Part-II for transactions related to Funds under Non-Recurring and Other Schemes, Part-III for Earmarked Funds and Extramural Research Projects, Part-IV for transactions related to Debts and Deposits Account and Part-V for maintenance of Provident Funds. The accounts for the year 2021-22 have been prepared in such formats as prescribed by the Ministry of Education, Govt. of India, on double entry book-keeping system of accounting on accrual basis with relevant Indian Accounting Standards.

Opening balance at the beginning of the financial year 2021-22 was Rs. 4297.78 lakh. During the year 2021-22, the University received a total amount of Rs.10697.35 lakh under Grants-in-aid: Recurring, Salary, Creation of Capital Assets. The University also generated Rs.1731.81 lakh as Internal Receipts which is a part of Grants-in-Aid: Recurring. Thus, the total fund available during the year was Rs.16726.94 lakh. Against the same, an amount of Rs.15392.46 lakh was spent during the year 2021-22 and Rs 89.99 lakh was Pull back by RBI on 31.03.2022, leaving an unspent balance of Rs. 1244.49 lakh as on 01.04.2022. In addition, University has received Rs 1436.16 lakh towards grants for Extramural Research Projects, out of which Rs 2254.64 lakh was utilized for such research projects.

| | | | | (Rup | ees in Lakh) |
|----------------------|---------|---------------------|------------------------|---------|--------------|
| RECEIPTS | | | EXPENDITURE | | |
| Particulars | Amount | Total Amount | Particulars | Amount | Total |
| | | | | | Amount |
| A) Opening Balance | | 4297.78 | A) Expenditure | | |
| B) Grants Received | | | I. Recurring | 4351.48 | |
| | | | Expenditure | | |
| I. Grants-in-Aid | 1547.31 | | | | |
| (Recurring) | | | II. Salary Expenditure | 8859.09 | |
| II. Grants-in-Aid | 7400.04 | | III. Expenditure for | | |
| (Salary) | | | Creation of Capital | 2181.89 | |
| | | | Assets | | |
| III. Grants-in-Aid | 1750.00 | | | | |
| (Creation of Capital | | | | | 15392.46 |
| Assets) | | 10697.35 | | | |
| | | | Pull back by the RBI | | |
| | | | | | 89.99 |
| | | 1721.01 | Closing Balance | | 1244 40 |
| C) Internal Receipts | | 1731.81 | | | 1244.49 |
| Grand Total: | | 16726.94 | Grand Total: | | 16726.94 |

The following statement represents the Receipts and Expenditure for the year 2021-22 at a glance.

Officers and Staff Members

| Designation | Name | <email></email> | Date of holding the |
|--|-------------------------|-----------------|---------------------|
| | | @tezu.ernet.in | current position |
| Finance Officer | Dr. Braja Bandhu Mishra | fotu | |
| Deputy Registrar | Kumarjit Dutta | kumarj | |
| Assistant Finance Officer (Officiating) | Sarat Chandra Konwar | saratk | |
| Internal Audit Officer | Niranjan Das | niraj | |

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| (Officiating) | | | |
|----------------------|-----------------------|----------|--|
| Junior Accountant | Biswajit Saha | bishu | |
| | Kandarpa Das | kandarpa | |
| | Apurba Medhi | apurbam | |
| | Alakananda Baishya | alka | |
| | Utpal Pal | utpaltu | |
| Upper Division Clerk | Lakhya Jyoti Gogoi | lakhyag | |
| | Deniel Bori | deniel | |
| | Brindabon Borah | brind | |
| | Durlav Pegu | durlav | |
| Stenographer | Kalyan Konch | kkonch | |
| Driver | Sarat Chandra Sarma | saratch | |
| Multi-Tasking Staff | Manoj Chakraborty | manojc | |
| | Ananda Rabha | rabhaa | |
| | Bharat Chandra Bhuyan | bharat | |
| | Bikash Jyoti Das | bikids | |

ACADEMIC SECTION

About the Section

The Academic Section deals with examinations, result declarations and other academic matters. This office also got involve in various committees viz, Academic Council, Research Committee, Students Disciplinary Committee, Anti Ragging Committee, etc and took action on the decisions of the committees. The Academic Council meetings were organised with Controller of Examinations as Member Secretary on 23.09.2021 and 20.02.2022 and Research Committee meeting on 07.05.2021 and 28.03.22.

| Designation | Name | <email></email> | Date of holding the |
|----------------------------|----------------------------|-----------------|---------------------|
| | | @tezu.ernet.in | current position |
| Controller of Examinations | Dr. Lakhi Boral | boral | 30/01/2019 |
| Deputy registrar | Anamika Pegu (Officiating) | anamikapegu | 07/04/2022 |
| Assistant Registrar | Sobhan Mahanta | soma | 17/05/2019 |
| Section Officer | Biren Sharma | birens | 17/05/2019 |
| Assistant | Ajanta Pathak | pathaka | 12/06/2013 |
| | Dwipendra Ch. Das | rdas | 01/05/2013 |
| Steno (Gr. II) | Arunjyoti Das | arundas | 28/04/2021 |
| LDC | Prohelika Hazarika | rimjhim | 26/07/2018 |
| MTS | Debajyoti Saikia | debajyoti | 01/01/2008 |
| | Bhola Sharma | bhola14 | 01/04/2021 |
| | Rupjyoti Das | rupjyoti | 26/10/2015 |

Officers and Staff Members

Programme of Study

During 2021-22, 73 different programmes were offered for admission in 27 Departments. The programs were:

- *Ph.D Programmes*: Chemical Sciences, Environmental Science, Molecular Biology & Biotechnology, Mathematical Sciences, Physics, Computer Science & Engineering, Civil Engineering, Electronics & Communication Engineering, Energy, Food Engineering & Technology, Mechanical Engineering, Electrical Engineering, Applied Sciences, Business Administration, Commerce, English, Hindi, Mass Communication and Journalism, Education, Sociology, Social Work, and Multidisciplinary Research.
 - A new Centre for Multidisciplinary Research was established for offering PhD programme in conformity with the NEP-2020.
- *M.Tech. Programmes*: Information Technology, Electronics Design & Technology, Bioelectronics, Food Engineering & Technology, Mechanical Engineering, Civil Engineering, Energy Technology, Computer Science & Engineering.
- *M.Sc. Programmes*: Physics, Chemistry, Mathematics, Molecular Biology & Biotechnology, Environmental Science.
- *M.A. Programmes*: English, Linguistics & Language Technology, Cultural Studies, Mass Communication & Journalism, Sociology, Hindi, Social Work, Education, Communication for Development and Assamese.
- 5-years Integrated M.Sc. Programmes: Physics, Chemistry, Mathematics and Life Science.
- 5-years Integrated M.Com. Programme: Commerce
- 5-year Integrated M.A. Programme: English.

- 4-year Integrated B.Sc.B.Ed. Programmes: Physics, Chemistry and Mathematics.
- *B.Tech. Programmes*: CSE, ECE, EE, ME, Civil, Food Engineering and Technology (FET), and Lateral entry in EE and FET.
- *Other Professional programmes*: MBA, MBA (Executive), MCA, LLM, M. Com, Master of Tourism and Travel Management (MTTM)), B.Ed and Master of Design (M.Des). M. Des was a new programme offered under Department of Design.
- *PG Diploma Programmes*: P.G. Diploma in Translation (Hindi), P.G. Diploma in Women's Studies, P.G. Diploma in Child Rights and Governance.
- *Certificate Programmes*: 1-year certificate in Chinese and one semester certificate in NSE Certified Capital Market Professional. The NSE Certified Capital Market Professional (NCCMP) programme was offered as self-financing Part Time course.

Admission

Selection of candidates for admission was on merit basis this year, like in the year 2020-21, as the entrance examination could not be conducted due to covid-19 pandemic. The students in UG/PG programmes (except in B. Tech, MBA, M.Sc. in Molecular Biology and Biotechnology programme) were admitted provisionally considering the marks of the prefinal semester of qualifying examinations subject to the condition that they would submit the necessary pass certificates in subsequent months.

For B. Tech., selection for admissions was made based on All India Rank (CRL) of the JEE (Main) conducted by the NTA. Sixty percent of the total seats were filled up by the candidates of NE states on the production of Permanent Residence Certificate (PRC) issued by the Competent Authority of NE states. Counselling and admission of the shortlisted candidates for NE reserved seats were held at Tezpur University, and reservation was followed as per GoI rules. Admission to the remaining seats was made through the Central Counselling conducted by the JoSAA.

GATE-qualified candidates were directly admitted to the M. Tech. Programmes based on merit of GATE scores. Some Non-GATE candidates were also admitted to the M. Tech programmes based on the performance in the online test. For admission to MBA program, candidates were selected based on the score of National tests such as MAT/CAT/XAT/ATMA/GMAT/CMAT and Personal Interview. Admission to M. Sc. in Molecular Biology and Biotechnology was made based on the score of GAT-B - 2021 conducted by NTA.

Candidates of PhD programmes were selected based test conducted by the concerned Departments online.

Twelve students were admitted under the Defence Quota as per Govt of India policy and 02 international students were admitted through ICCR on a supernumerary basis. The number of foreign candidates sharply declined this year due to Covid-19 pandemic.

A total of 17644 applications were received through online mode for various programmes of studies. The number of candidates admitted to various programmes was 1601 out of intake 1993, of which 46.33% were female students. The University reserved seats for the OBC (NCL), SC, ST, EWS and PWD categories as per the Govt. of India rules.

As on December 2021, the total strength of the students in the university was 4597 and the percentage of reserved category students on the campus were 24.79% (OBC-NCL), 11.16% (SC), 7.31% (ST), 5.57% (EWS) and 0.95% (PWD). The total number of foreign students at the University was 13.

Overall, 81.02% of the students were from the state of Assam, while 18.69% students were from the rest of the country.

Classes, Examinations and Results

Classes of newly admitted students in the Academic session 2021-22 were conducted online from 5th October 2021 for MBA, M. Des and PhD programmes and from 21st October 2021 for other programmes (except B. Tech). B. Tech classes started on 1st December 2021. The delay in starting the new session was due to effect of Covid-19 pandemic. However, the classes of the second semester were conducted in offline mode w.e.f 10th March 2022. The classes of second semester B. Tech were further delayed. Classes of the Intermediate and final year students were held in offline mode from the August 2021, and their next semester started as per scheduled date.

The Spring Semester (Even Semester) End Examinations, 2021 were conducted during the period from 04.06.2021 to 30.06.2021, and the results were declared on 31.07. 2020. The Autumn Semester (Odd Semester) End Examinations, 2021 (except first semester) were conducted during 9.12.2021 to 20.12.2021, and the results (except 1st semester) were declared on 07.01.2022. The examination of the first semester it was conducted during 16.02.2022 to 04.03.2022 and results were declared on 16.03.2022. The delay in declaring the results of the first semester students was due to delay in starting the academic session, which started on 5th October 2021, due to covid_19 pandemic.

As many as 1080 nos. of final (last) semester students appeared in the Spring semester examinations in the year 2021, and 97.59% of the students passed the examinations.

Convocation

The 19th Convocation was held on 26.02.2022 and His Excellency President of India Shri Ram Nath Kovind graced the Convocation ceremony as the Chief Guest and delivered Gold medals to ten toppers of the year 2021 and delivered his Convocation address. His Excellency, Governor of Assam & Chancellor Shri Jagadish Mukhi and Honourable Chief Minister of Assam, Dr. Himanta Biswa Sarma, were also present at the ceremony and addressed to the dignitaries and awardees.

A total of 1249 passed-out students, including passed out from Centre for Open and Distance Learning, were eligible to receive the degrees and Diplomas in the Convocation. The Honourable President of India awarded gold medals to the ten best toppers from all the schools. In addition to this, 36 Gold Medals were awarded to other toppers of UG and PG programmes in the Convocation. The Best Graduate medal was awarded to Mr. Pushpak Jalan (Roll no. CSB17002) of B. Tech in Computer Science & Engineering programme and the Best Postgraduate medal was awarded to Mr. Vivek Gupta ((Rollno.FEM19007) of M. Tech Food Engineering & Technology programme. There were 63 students who were awarded PhD degrees in the Convocation.

Free Studentship and Fellowship/Scholarship

As many as 23 (twenty-three) students belonging to the BPL family were awarded free studentship in the Autumn Semester 2021. As per the free studentship guidelines, they were exempted from paying any fees except a Caution deposit, Medical Insurance fees and hostel menial Charge and hostel mess advance.

Fresh applications for non-NET fellowship were also scrutinized, and 150 PhD students were awarded the non-NET fellowship. During the year as many as 390 PhD students (fresh and continuing) availed the non-NET fellowship from the University. Forty-two students of M. Tech programmes have received a GATE scholarship in the year 2021-22. Fifty-two students of M. Sc in Molecular Biology and Biotechnology were awarded DBT Stipend. Applications of many students were forwarded to NSP for Ishan Uday Scholarship, Post Metric Scholarship for SC, ST and OBC students, Merit cum means

scholarship, Post Metric scheme for minority students, PG scholarship for university rank holders, etc. for award of the scholarship, however, no information was received from the funding agencies about exact number of recipients of the scholarship.

INTERNAL QUALITY ASSURANCE CELL

About the Cell

As mandated by NAAC (National Assessment and Accreditation Council), Tezpur University Internal Quality Assurance Cell (TU IQAC) is engaged in a series of activities required to foster the spirit of quality among the individuals and Departments/Sections of the University. Besides working for assured quality assessment for the career advancement of faculty members, IQAC also carries out capacity-building activities to support quality teaching-learning and assist feedback and mentoring exercises. IQAC meetings are organized at regular interval for deliberations on significant issues concerning quality with monitoring of the follow-up actions. University's annual activities are appropriately accounted for in the Annual Quality Assurance Report (AQAR) prepared by IQAC.

Notable activities of the Cell

- NAAC Sponsored State Level One-Day Workshop on "*Challenges in revised NAAC assessment and accreditation framework*." The Director, IQAC, Tezpur University deliberated in the event organized by Arya Vidyapeeth College, Guwahati, Assam, on 26 June 2021.
- The 1st meeting of IQAC Committee was held on 07 July 2021, where several important matters were discussed.
- On Engineer's Day, held on 15 September 2021, the Director of IQAC, Tezpur University, deliberated on "*Quality aspects of engineering projects*."
- Orientation Program for Screening and Verification of the Annual PBAS of the Faculties was held on 23 December 2021.
- Awareness and Sensitization Program on "*Good Academic Research Practices*" was organized for Research Scholar and students during Nov-Dec 2021, in collaboration with the Departments under various Schools of Tezpur University.
- The 2nd meeting of IQAC Committee was held on 19 January 2022, where several important matters were deliberated.
- Annual Quality Assurance Report (AQAR) for the year 2020-2021 was submitted to NAAC on 21/01/2022.
- National Level Workshop On "*NAAC Revised Accreditation Framework (RAF): Its Relevance in the Present Higher Education Paradigm in India.*" The Director of IQAC, Tezpur University, deliberated in the event organized by Srikishan Sarda College, Hailakandi, Assam-788151 on 01 March 2022.
- Orientation meeting on Preparation for the forthcoming NAAC Peer Team visit was held on 10 March 2022.

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the current position |
|-----------------|-------------------------|-------------------------------|---|
| Director | Debendra Chandra Baruah | baruahd | 01-11-2017 |
| Data Consultant | Santanu Mahanta | santanu | 05-07-2016 |

Officers and Staff Members

INTERNATIONAL STUDENTS OFFICE

About the Office

International Office of Tezpur University was established in February 2013. It was rechristened as the International Students Office on July 28, 2021, vide BoM resolution no 102/2021/3/2.2. The International Students Office is run by a part-time Director who is assisted by a Coordinator and an Assistant Coordinator. The International Students Office handles the admission of international students and organizes talks and seminars on overseas education and research opportunities.

Activities

The activities of the International Students Office continued to be impacted by COVID-19, which saw a downturn in the number of international students seeking admission. A few students were admitted via the newly established Indian Council for Cultural Relations (ICCR) admission portal. These students initially attended online classes along with their Indian counterparts before arriving on the campus later in the academic year. All international students present on campus were vaccinated on June 22 (also subsequently) in the university's Health Centre. On June 25, International Students Office called a meeting of Deans and Heads to discuss the processing of ICCR applications and how to increase the number of international students.

The Director of the International Students Office also attended an online meeting organized by Director General, ICCR on July 2 to discuss admission matters. A function was organized by the office to give away certificates to passing-out students on August 9. Another function was organized to welcome new international students (those joining after the lifting of lock-down) on December 8.

| Designation | Name | Highest | <email></email> | Date of holding the |
|-----------------------|-----------------|---------------|-----------------|---------------------|
| | | Qualification | @tezu.ernet.in | current position |
| Director | Prof. P. K. Das | PhD | tuiso | 28-07-2021 |
| Coordinator | Ratan Boruah | PhD | rboruah | 28-07-2021 |
| Assistant Coordinator | Krishna Das | PhD | krishnadas | 28-07-2021 |
| Multi-Tasking Staff | Ranjit Saikia | Matric | saikia | 28-07-2021 |

Officers and Staff Members

OFFICE OF THE PROCTOR

About the Office

The Proctor's office was established on 24-09-2018. The primary function of this office is to look after matters related to regulations on discipline and proper conduct of students of Tezpur University.

| Designation | Name | Highest Qualification (Institute) | <email> @tezu.ernet.in</email> | Date of holding the current position |
|---------------|---------------------------|---|------------------------------------|--|
| Chief Proctor | Prof. Sankar Chandra Deka | Ph.D | sankar | 24-09-2018 |
| Proctor | Prof. Raza Rafiqul Hoque | Ph.D | rrh | 24-09-2018 |
| Proctor | Prof. Joya Chakraborty | Ph.D | jc | 24-09-2018 |

Officers and Staff Members

Significant Activities

The proctor office look after the matters related to regulations on discipline and proper conduct of students of Tezpur University. There are no significant activities performed by the office like outreach/extension activities, events organized etc.

REPORT OF THE DEAN, RESEARCH AND DEVELOPMENT

About the Office

The office of the Dean, R&D facilitates the implementation and smooth creation of extramural research projects funded by the various Government and non-Government funding agencies like UGC, DST, DBT, MeitY, MoEF&CC, NEC, AICTE, DAE, DRDO, DRL, ISRO, ICMR, ICAR, CSIR, INSA, ASTEC, UNICEF, IUAC, Ministry of Earth Science, Ministry of Food Processing Industries, MNRE, ONGC and others. This office takes responsibility for advertisement and appointment of project staff; permits conduct of field trips/visits as required by the project staff and PIs and/or Co-PIs; grants permission to attend workshops/seminars/symposiums/ conferences as well as to visit different research laboratories by using the project grant. In addition to managing extramural research projects such as UGC-SAP, UGC-BSR startup grants, DST-FIST and DBT funded schemes. Dean R&D also facilitates the Tezpur University Ethical Committee, Tezpur University Animal Ethical Committee and Tezpur University Biosafety Committee meetings. This office has also been involved in implementation of projects approved by ONGC-CPBT, an example of Academy-Industry collaboration at Tezpur University.

| Designation | Name | <email></email> | Date of holding the |
|-----------------|--------------------------------------|-----------------|---------------------|
| | | @tezu.ernet.in | current position |
| Dean | Prof. Niranjan Karak | nkarak | 01/04/2019 |
| Section Officer | Himadri Das | himdas | 02/05/2013 |
| Assistant | Raj Kumar Das | raj | 06/03/2020 |
| MTS | Dharanidhar Bania (up to 21/10/2021) | baniad2 | 16/09/2019 |
| | Partha Pratim Basumatary | parthab | 22/10/2021 |
| | (w.e.f. 22/10/2021) | | |

Officers and Staff Members

Research Projects (both Ongoing and New)

It may be mentioned that the Dean R&D keeps the account of R&D activities of the University, liaisons between the researchers of the University and the funding agencies, facilitates R&D activities and contributes towards creating a conducive atmosphere for research activities. During the year 2021-2022, this office has forwarded 94 research proposals for consideration of approval to the funding agencies. At present a total of 209 externally funded research projects are ongoing with a financial outlay of Rs. 7432.53 lakhs plus €105428.75 and £31,500. During the year 2021-2022, 26 new projects were sanctioned. The ongoing research projects include 15 international collaborative projects of which 2 projects are under Indo-UK, 2 with Indo-Russian, 1 with Indo-Brazil, 2 with Nottingham University, 1 with CEFIPRA (Indo-French), 1 with Indo-German, 1 with Indo-Hungary, 2 with Indo-ASEAN, 1 with Indo-Sweden, 1 with ERASMUS (Indo-Greece-Italy) and 1 with Indo-Bulgaria. During this period, three departments were supported by DRS-II under the UGC-SAP. The faculty members have published several research papers in peer-reviewed national and international journals. Further, these projects have augmented the research skills of the project staff and have created trained manpower to cater to the need of society.

Consultancy Works

The office also facilitates consultancy projects of faculty as per the TU guidelines. Total amount earned through consultancy projects during 21-22 was approximately INR 2,06,36,080/-. This amount was earned as consultancy fee by individual faculty and the departments of various Schools.

Fellowship

In addition, the office also deals with various fellowship matters such as UGC-NET JRF, NFOBC, NFST, NFST, MANF, DS Kothari, SVSGC, CSIR-JRF/SRF, DST-INSPIRE, DBT-JRF etc. Different fellowships received during 21-22 are as follows:

| Name of Fellowship | Number of Recipient Students |
|--------------------|------------------------------|
| UGC-NET (JRF) | 09 |
| NFST | 06 |
| CSIR-JRF | 06 |
| CSIR-SRF | 02 |
| NFSC | 02 |
| MANF | 01 |

REPORT OF THE DEAN, STUDENTS' WELFARE

About the Office

The office of the Dean Students' Welfare provides ample scope, opportunities, and facilities for the allround development of personality and leadership qualities among the students. The University has a vibrant student community actively involved in sports, cultural, literary, and other extra-curricular activities.

Students Discipline

The office of the Dean, Students' Welfare has been looking after the matters of students' discipline. Like the previous years, the Anti-Ragging committees and Anti-Ragging squads continued their constant vigil to keep the University Ragging Free. As a result, there has been no disruption of academic activities because of students' unrest in the last year. This was made possible because of the efficient and dedicated grievance redressal mechanism in place in the university, both online and offline.

Students Activities

The student community of the University is proactive in pursuing sports, cultural, literary, and other extra-curricular activities. Sports and cultural events are organized regularly on the campus, wherein we can see the spontaneous participations of a large number of students. A brief note on the cultural and sports activities of the university are as follows:

The cultural section of the university is quite resourceful and very proactive in nurturing the talents of the students by providing the best facilities. Music Practice Room is available at the Students' Activity Centre. Kalaguru Bishnu Prasad Rabha Auditorium, Community Hall, and Chandra Prabha Saikiani Bhawan are some of the facilities for practice and performance. There are different instruments like Guitar, Drum Set, Synthesizer, Dhol, Bor Dhol, Kobi Dhol, Madol, Doba, Pepa, Bahi, Gogona, Kham, Khol, etc. are available for the use of students.

Sports Activities

The University has crated impressive facilities and support systems to encourage the students to take up sports and games along with their studies. Some of the major facilities which are in place are as follows:

- Football ground with floodlights facility
- One 400-meter track cum cricket field with floodlights facility
- Two Basketball courts with floodlights facility
- Two Volleyball courts with floodlights facility
- One Tennis court with floodlights facility
- One Indoor Stadium (Badminton Court with YY Yonex Synthetic Mat)
- A gymnasium with world class Weider products, USA, and Afton product
- One Swimming Pool

Annual Meet 2021-2022

The Annual Meet 2021-2022 of Tezpur University was organized by the Students Council from 5th March 2022 to 20th March 2022. There were both group and individual competitions. The group competitions were either Inter-Departmental or Inter-Hostel. Some of the major competition events were Dances, Drama, Song, Literary, Debate, Photography, Fine Arts, Wall Magazine, Cultural procession, etc.

| Event | Position | Name (Hostel) |
|--------------|---|----------------------------|
| Music | Best Singer | Ankita Konwar (DWH) |
| Dance | Best Dancer | Akaash Ranjan Phukan (CMH) |
| | Best Actor | Sashreek Ganguli (SCVRMH) |
| Skit | Best Actress | Pratyashi Baishya (NWH) |
| <i>SKII</i> | Best Supporting Actor | Satyajit Borah (KMH) |
| | Best Supporting Actress | Anamika Nath (PMCWH) |
| | Best Comedian | Karan Kumar Das (PMH) |
| | Script Writer (Appreciation For Original) | Angshuman Hazarika (NMH) |
| | Best Supporting Actor | Satyajit Borah (KMH) |
| | Best Supporting Actress | Anamika Nath (PMCWH) |
| One Act Play | Best Director | Abhijit Deka (KMH) |
| | Best Actor | Chiranjeeb Batsyas (CMH) |
| | Best Actress | Chiyangshi Phukon(DWH) |
| | Judge Special Award | Samiran Adhikary (CMH) |
| | Judge Special Award | Juganta Janam Gogoi (NMH) |
| | Best Dhulia | Abhijeet Gogoi (SCVRMH) |
| Bihu | Best Pepabadak | Ashish Bordoloi (KMH) |
| Diriu | Best Bihua | Abhinab Dutta (NMH) |
| | Best Bihuwati | Trishna Ray (KWH) |

Best Performers of Annual Meet 2021 -2022 in Cultural/Literary/Visual Arts

Sports Activity

The 24th Annual Meet, 2021-22 of Tezpur University was started in the month of March 2022 with Football, Cricket, Archery, Volleyball, Basketball, Badminton, Table Tennis, Chess, Kho Kho, Kabaddi, Carrom, Lawn Tennis Competitions. Finally, the concluding session was held from 5th March 2022 to 20th March 2022 with Track & Field events, Weightlifting, Powerlifting, Best Physique, Arm Wrestling, Tug of War, Cycling and Half Marathon along with March Past Competitions.

Vice Chancellor, Prof. Vinod Kumar Jain lighted the main lamp followed by hoisting of the University flag. Earlier the Assistant Director of Physical Education, Mr. R.R Singh handed over the torch to Professor Jain, which was carried by the Assistant Director of Physical Education (ADPE) along with the captains of the winning teams, Outdoor and Indoor Games Secretary. Major Gen Sanjay Sajjanhar, COS HQ 4 Corps, Mission Charali graced the Inaugural

| Year | Date | Event | Venue | AIU/Others | Achievement |
|------|--------------------------------------|----------|-------------------|---------------------|-------------|
| | 22^{nd} to 26^{th} | | Kalinga Institute | AIU Inter Zonal | |
| 2021 | December | Swimming | of Social | Swimming Tournament | Participate |
| | 2021 | | Sciences (KISS) | (M/W) 2021-22 | |
| | 24^{th} to 28^{th} | | | AIU All India Inter | |
| 2022 | February | Arabamy | Chandigarh | Zone Archery | Participate |
| 2022 | 2022 | Archery | University | Tournament (M/W) | Farticipate |
| | 2022 | | | 2021-22 | |

Events Organized by Students' Activity Centre, Tezpur University

| SI No. | Event | Date | |
|--------|------------------------------------|------------------------------|--|
| 1 | Yoga Day | 21 st June 2021 | |
| 2 | Art of Leaving | 21-23 July 2021 | |
| 3 | Independence Day (Online painting) | 15 th August 2021 | |
| 4 | Cricket Match (Faculty/Staff) | 15 th August 2021 | |
| 5 | Fit India Movement | 29 th August 2021 | |

Tezpur University :: Annual Report 2021-22 (Dean, Students Welfare)

| 6 | Celebration of Swarnim Vijay Varsh | September 2021 |
|----|------------------------------------|--------------------------------|
| 7 | Unity Day | 2 nd October 2021 |
| 8 | Inauguration of basketball court | 1 st December 2021 |
| 9 | Republic Day | 26 th January 2022 |
| 10 | Inauguration of cricket Ground | 20 th February 2022 |

Overall Best Performers of 24th Annual Meet 2021-22 (Sports)

| Sl. No. | Game | Name of Best Player (Hostel) | | |
|---------|--|---------------------------------|--|--|
| 1 | Kabaddi (Men) | Narottam Gogoi (NMH) | | |
| 2 | Kabaddi (Women) | Budagam Poojitha | | |
| 3 | Volleyball (Men) | Saurab Debnath (PMH) | | |
| 4 | Volleyball (Women) | Stanzin Tsangyang (PWH) | | |
| 5 | Basketball (Men) | Chandrim Konwar (KMH) | | |
| 6 | Basketball (Women) | Aditi Gogoi (SWH) | | |
| 7 | Best Athlete (Man) | Surjit Kumar Yengkhom (NMH) | | |
| 8 | Best Athlete (Woman) | Daisy Basumatary (KWH) | | |
| 9 | Strong Man, 2021-22 | Kaustav Das (NMH) | | |
| 10 | Strong Women, 2021-22 | N. Sophia Devi (PMCWH) | | |
| 11 | Best Lifter (Man) | Awanish Singh (SCVRMH) | | |
| 12 | Best Lifter (Women) | N . Sophia Devi (PMCWH) | | |
| 13 | Champion Of The Champion (Yoga) | Nipona Shill (SWH) | | |
| 14 | Champion Of The Champion 2021-22 (Men) | Dipankar Nath (MBA) | | |
| 15 | Champion Of The Champion 2021-22 (Women) | Priyanka Saikia (PWH) | | |
| 16 | Mr. Tu (Men Model Physique 2021-22) | Rajat Shubro Bose (SCVRMH) | | |
| 17 | Mr. Tu 2021-22 | Deepankaj Bhattacharya (SCVRMH) | | |
| 20 | Best Commander Men (March-Past) | Biliphang Basumatary (KMH) | | |
| 21 | Best Commander Women (March-Past) | Jugami Brahma (DWH) | | |

Officers and Staff Members

| Designation | Name | <email> @tezu.ernet.in</email> | Date of holding the current |
|---|-------------------------|------------------------------------|--------------------------------|
| | | @tezu.ernet.m | position |
| Dean | Prof. Dhanapati Deka | dsw | 01-02-2017 |
| Associate Dean (Sports) | Prof. Manabendra Mandal | adsw14 | 28-11-2014 |
| Associate Dean (Cultural & Lit.) | Dr. Juri Gogoi Konwar | jgkon | 30-03-2016 |
| Assistant Director of Physical Education | Mr. Rajkumar Raju Singh | rrsingh | 20-07-2018 |
| Sports Officer | Mr. Bahniman Sarmah | bahinam | 01-01-2021 |
| Clinical Psychologist | Mr. Asish Pratim Bora | asishpb | 01-02-2022 |
| Senior Administrative Assistant | Dr. Swagat Chutia | swagat.energy | 17-01-2022 |
| Office Assistant | Mr. Saurav Jyoti Borah | sborah | 02-01-2017 |
| Multi-Tasking Staff (MTS) | Mr. Dudu Tamuli | dtamili | 20-05-2013 |
| | Mr. Jiban Damai | jiban | 03-04-2017 |
| | Mr. Biren Bora | biren73 | 30-09-2019 |
| | Mr. Sahed Ali | sahedali21 | 17-03-2017 |

TRAINING & PLACEMENT CELL (ENGINEERING)

About the Cell

The Training and Placement Cell acts as an effective institutional arrangement primarily aimed at training and placement of students in the best-known corporate entities in the country. It establishes linkages with various corporate and facilitates placement events on campus as well as off campus. One of the major activities of the Cell is to groom the students to make them industry ready and enhance their chances of employability. The Cell is also playing an active role in placing many students through Internships, initially with a stipend and later regularized in the payroll of the company. During the reporting period, 07 technical training sessions with durations ranging from a week to fortnight, and 06 career counselling sessions by industry experts were organized by the Training & Placement Cell of SoE. The Placement Cell of the School of Engineering had another successful year of placement for the batch of 2022, wherein 41 organizations participated, and the highest salary package offered was USD 48000 P.A by Blockswap. The other organizations where our students got placed are Oil India Limited, Antares Technologies, Techvariable, Maventic, KEC International, Cognizant Technologies Solution, Wipro Ltd, Zaloni Technologies, TCS, Betsol Software Pvt. Ltd. and Capgemini Technology Services India Ltd, Alstom, Amazon, Indradhanush Gas Grid Limited, IQVIA, ITC infotech Limited, Tata Technologies Ltd, L&T Technology, L&T Limited, Federal Bank etc.

| workshop/symposium/semmar/mvneu Taik etc. Organizeu | | |
|---|------------------------|-------------|
| Title of Event/Talk | Resource Person | Data/Period |
| An Interactive session by Ambassador Dr. Deepak Vohra as guest | Ambassador Dr. | 08-11-2021 |
| speaker on the topic "Our world in 2025 with India Perspective" at | Deepak Vohra | |
| T&P Cell, SoE Deans Gallery 3:30 PM on 08 th Nov. 2021. Total 256 | | |
| nos students and Faculty attended the session. | | |
| A webinar by Dr. Pradeep Kumar Ramancharla, Professor & | Dr. Pradeep | 24-11-2021 |
| Registrar, IIIT Hyderabad on the topic "Life Beyond Smart Living" | Kumar | |
| at T&P Cell Deans Gallery on 24 th Nov. 2021. Total 91 students | Ramancharla | |
| attended the webinar. | | |
| A Webinar by Ministry of MSME, Govt. of India on the topic "To | MSME Officials | 01-12-2021 |
| Motivate for a Career in the field of Entrepreneurship" at T&P Cell | | |
| Deans Gallery on 01 st Dec 2021. Total 114 nos students attended the | | |
| webinar. | | |
| A workshop on "Empowered Communication" by Ambassador Dr. | Ambassador Dr. | 24-12-2021 |
| Deepak Vohra on 24 th Dec 2021 at Training and Placement Cell, | Deepak Vohra | |
| SoE Deans Gallery. Total 45 nos students participated on the | | |
| workshop. | | |
| A workshop on "TRUST" by Ambassador Dr. Deepak Vohra on 25 th | Ambassador Dr. | 25-12-2021 |
| Dec 2021 at Training and Placement Cell, SoE Deans Gallery. Total | Deepak Vohra | |
| 17 nos students participated on the workshop. | | |
| A workshop on "Being Interview" by Ambassador Dr. Deepak | Ambassador Dr. | 26-12-2021 |
| Vohra on 26 th Dec 2021 at Training and Placement Cell, SoE Deans | Deepak Vohra | |
| Gallery. Total 18 nos students participated on the workshop. | | |

Workshop/Symposium/Seminar/Invited Talk etc. Organized

Distinguished Visitors

| Name of the Visitor | Designation | Organization/Company | Date/Period |
|---------------------|-------------|----------------------------|--------------------|
| Shri Ajit Thakur | CEO | Indradhanush Gas Grid Ltd. | 12-03-2022 |

| Name of the | Designation Offered | No. of | Academic | Department |
|------------------------------------|---|--------------------|--|-------------------------------|
| Organization/ Company | | Students Placed | Programme | |
| Accolite Digital | Internship | 01 | B-Tech CSE | CSE |
| Allegion | Graduate Engineer Trainee | 06 | B-Tech CSE MCA | CSE |
| Alstom | Graduate & Post graduate Engg. Trainee | 09 | B-Tech CSE, ECE, M-Tech ELDT, ME | CSE, ECE |
| Amazon India | Software Developer Engineer | 01 | B-Tech CSE | CSE |
| Amul | Territory Sales In-Charge | 02 | B-Tech FET | FET |
| Antares Tech | Internship | 03 | MCA | CSE |
| Betsol | Associate Software Engineer | 05 | B-Tech CSE, M- Tech IT | CSE |
| Blockswap | Engineer | 01 | B-Tech CSE | CSE |
| Brainayan | Software Engineering | 01 | B-Tech CSE | CSE |
| Capgemini Technologies | Analyst, Senior Analyst | 13 | B-Tech CSE, EE, ECE, Civil, MCA | CSE, EE, ECE, Civil |
| CDAC | Internship | 05 | B-Tech CSE, M- Tech IT | CSE |
| Cognizant Technologies | Analyst Trainee | 44 | B-Tech EE, CSE, ECE, ME, Civil, MCA, M-Tech IT | EE, CSE, ECE, ME, Civil |
| CoinDCX | Internship | 01 | B-Tech CSE | CSE |
| Cordis | Software Engineer Intern | 02 | MCA | CSE |
| Federal Bank | Junior Management Grade I | 09 | M-Tech ELDT, Bio, ME B-Tech Civil, ECE | ECE, ME, Civil |
| IGGL | Engineer | 01 | B-Tech ECE | ECE |
| IQVIA | Associate Software Developer | 09 | B-Tech CSE, ECE, CSE, EC MCA, M-Tech CSE | |
| ITC Infotech | Associate IT Consultant | 18 | B-Tech CSE, EE, Civil, ECE, ME ME | |
| KEC International | Engineer | 04 | B-Tech EE | EE |
| L & T Limited | Graduate Engineer Trainee | 04 | B-Tech ECE, EE, ME | ECE, EE, ME |
| L&T Technology Services | Post Graduate Engineer Trainee | 08 | M-Tech CSE, IT | CSE |
| Maventic | Internship | 01 | B-Tech CSE | CSE |
| Netenrich Technologies | Internship | 01 | MCA | CSE |
| Oil India Limited | Sr. Engineer | 03 | B-Tech ME | ME |
| Paralaxion | Associate Software Engineer | 01 | MCA | CSE |
| Prasuma | Trainee | 03 | M-Tech FET | FET |
| RDC Concrete | | 01 | B-Tech Civil | Civil |
| Saint Gobain | Engineer | 03 | B-Tech ME, Civil | ME, Civil |
| Sanmar Group | GET | 01 | B-Tech ME | ME |
| Siemens Technology and Services | Internship | 01 | B-Tech CSE | CSE |
| Software AG | Internship | 02 | MCA | CSE |

| Tata Technologies | Graduate Engineer Trainee | 07 | B-Tech ME | ME |
|---------------------|-----------------------------|----|--------------------|-------------|
| TCS | Assistant System Engineer- | 09 | B-Tech CSE, ECE, | CSE, ECE |
| | Trainee | | MCA | |
| Team Lease | Internship | 01 | B-Tech CSE | CSE |
| Tech Variable | Junior Programmer Analyst | 02 | MCA | CSE |
| Velocity | SDE | 03 | B-Tech CSE | CSE |
| VKV | Faculty | 01 | M-Tech IT | CSE |
| Vodafone | Internship | 01 | MCA | CSE |
| WazirX | Software Development | 01 | B-Tech CSE | CSE |
| | Engineer | | | |
| Wipro | Project Engineer | 24 | B-Tech Civil, ECE, | Civil, ECE, |
| | | | CSE, EE, ME | CSE, EE, ME |
| Zaloni Technologies | Associate Software Engineer | 05 | B-Tech CSE, MCA | CSE |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the |
|---------------------|------------------------|-------------------------------|---------------------|
| | | | current position |
| Professor-in-Charge | Sarat Saharia | Sarat | 22-09-2021 |
| Deputy Director | Pijush Chandra Das | pijush | 11-11-2016 |
| Multi Tasking Staff | Mr. Nayan Jyoti Kalita | nayank@tezu.ernet.in | 29-04-2018 |

TRAINING & PLACEMENT CELL (NON-ENGINEERING)

About the Cell

The Placement Cell (Non-Engineering) of Tezpur University creates a platform where students can showcase their talents, which different organizations seek to explore and utilize. Starting from 1996, we have successfully placed several students who have appeared for placement processes.

While the Covid-19 pandemic continues to affect the economy and job market, the Training and Placement cell (Non- Engineering) of Tezpur University has continued its streak of growth in Placement Season 2021-22. The Cell hosted 44 Organizations and conducted recruitment drives for our students in online and offline modes. The placement opportunities were complemented by lucrative pay packages. Each year, we invite companies from various fields to make more options available to all Non-engineering Students of our university. The placement cell maintains a constant contact with students and notifies upcoming webinars, Placement Preparation trainings, skill building workshops, and on, off and pool campus recruitment processes. As we move ahead, we will continue to support our students through various initiatives to ensure that once they graduate, they have some direction to move their careers forward.

| Workshop/Sym | posium/Sen | ninar/Invited | Talk e | tc.Organized |
|--|------------|---------------|--------|--------------|
| ······································ | | | | |

| Title of Event/Talk | Data/Period |
|--|-------------|
| Online session on Fulbright-Nehru and other Fulbright fellowships in association with Fulbright Commission in India. | 19-04-2021 |
| EducationUSA India is presenting a series of webinars "Hallmarks of U.S. higher education" | 30-06-2021 |
| Webinar series on 'Career and academic prospects after MBBT" in collaboration with Department of MBBT | |
| Talk 1: Opportunities and Job roles in Pharmaceutical Sector by Ishani Goswami (Batch 2014-16) Novo Nordisk A/S, Bangalore | 03-07-2021 |
| Talk 2: Career Opportunities in Human Data Analytics, Namrata Borthakur (Batch 2014-16) IQVIA India, Gurugram | |
| Talk 3: Excitement of Microbiologist in Industry, Abhisweta Bhatt (Batch 2016-18) Havells India Limited, Haridwar | 4-07-2021 |
| Talk 4: Industrial Training after Master program in Life Sciences Bandana Singha (Batch 2018-20) | |
| Dr.Reddy's Laboratories, Hyderabad | 5-07-2021 |
| Talk 5: Sensing the second messengers: Mechanistic insights into how bacteria signal through second messengers, Dr. Badri Nath Dubey (Batch 2004-06) Staff Scientist CSSB-Centre for Structural systems biology, Deutsches, Hamburg | 5-07-2021 |
| Talk 6: Academic career prospects after master program in life sciences and share my own story about the excitement in science and prospects of doing a Ph.D. in Europe, Dr.Badri Nath Dubey (Batch 2004-06) Staff Scientist CSSB-Centre for Structural systems biology, Deutsches, Hamburg | 17-07-2021 |
| Talk 7: How to apply for a PhD abroad- A Personal Reflection and Experience, Bondita Dehingia (Batch 2015-17) Graduate Student, Dioscuri Center of Chromatin Biology and | |

| Epigenomics Nencki Institute | | |
|---|-------------|--|
| | | |
| Webinar on "Identify your strength to Navigate from Today's uncertainties" by Dr.Giri | 27-08-2021 | |
| Shankar, Behavioral scientist GS ventures. | | |
| DAAD Organised a combined E-Visit and presented on DAAD scholarship | 17.00.2021 | |
| programmes to some of the Universities in NorthEast India | 17-09-2021 | |
| Pre-placement Grooming Programme (Resume Writing, Group Discussion) Resource | 18-09-2021 | |
| Person: Dr Ajit Kumar Naik, Sr.Consultant - Brainayan | | |
| Pre-placement Grooming Programme (Presentation Skills, Interviewing Skills) | 25-09-2021 | |
| Resource Person: Dr Ajit Kumar Naik, Sr.Consultant - Brainayan | | |
| Pre-placement Grooming Programme (Mock GD & Interview) for School of HSS & | | |
| Science students Resource Person: Dr Ajit Kumar Naik, Sr.Consultant - Brainayan | | |
| Pre-placement Grooming Programme (Mock GD & Interview) for School of | 03-10-2021 | |
| Management Science students Resource Person: Dr Ajit Kumar Naik, Sr.Consultant - | | |
| Brainayan | | |
| Webinar on Leadership in Education for the 21st century by The Teach for India | 01-11-2021 | |
| Fellowship Resource Person: Puja Sarkar -TFI Fellow-2018, Denim Barugohain - TFI | | |
| Fellow-2019, (TU Alumni) | | |
| Webinar on " Career Choices in the world of Communication: Let's get Candid with | 24-02-2022. | |
| Parash" Ms. Parash Deori (TU alumna), Director - Millennial Board, Adfactors PR. | | |

Distinguished Visitors

| Name of the Visitor | Designation | Organization/Company | Date/Period |
|---------------------|-----------------------------|----------------------|-------------|
| Dr.Giri Shankar | Behavioral Scientist | GS ventures. | 27-08-2021 |
| Ms. Parash Deori. | Director - Millennial Board | Adfactors PR | 24-02-2022 |

Notable Placement

| Name of the Organization/ Company | Designation Offered | No. of Students Placed | Academic Programme | Department/Centre |
|---|--------------------------------------|------------------------------|-----------------------|---|
| Indian Political Action Committee | Political Analyst | 1 | MA | Mass Communication & Journalism |
| Intellipaat | Inside sales Manager | 2 | MA | Mass Communication & Journalism |
| Source one management Service | HR Recruiter | 1 | MBA | Business Administration |
| Havells India Ltd. | Microbiologist | 1 | M.Sc | MBBT |
| Vitra.ai | Data Associate- Linguistic Expert | 1 | MA | Mass Communication & Journalism |
| Kuhipat communications and technology Pvt. Ltd | Digital marketing manager | 2 | MBA | Business Administration |
| Jubilant Foodwork Limited | HR Trainee | 1 | MBA | Business Administration |
| Jettwings Business School | Tourism Faculty | 1 | MTTM | Business Administration |
| Vivo | VBA service Executive | 1 | MBA | Business Administration |
| Piramal Foundation | Gandhi Fellow | 2 | MA | Social Work & Mass Communication & Journalism |
| Aaranyak | Project Officer- Trainee | 2 | MTTM | Business Administration |
| Accenture | Platform Advisory | 13 | MBA | Business |

Tezpur University :: Annual Report 2021-22 (Training & Placement Cell, non-Engineering)

| | Associate | | | Administration |
|------------------------|-------------------------|---|------------|-----------------------|
| Asian Paints | Project Sales Officer | 1 | MBA | Business |
| | | | | Administration |
| Azim Premji Foundation | Associate | 1 | MA | Linguistics |
| Bharti Airtel | Executive Trainee | 1 | MBA | Business |
| | | | | Administration |
| Fin-Advisors | Junior Research Analyst | 1 | MBA | Business |
| | | | | Administration |
| HDFC AMC | Sales/client service | 1 | M.Com | Commerce |
| Hindustan Unilever | Executive Trainee- | 1 | MBA | Business |
| | Customer Development | | | Administration |
| ITC Limited | Logistics Trainee-IA2/ | 4 | MBA | Business |
| | Sales Trainee | | | Administration |
| Landmark Group | Management Trainee | 3 | MBA | Business |
| - | _ | | | Administration |
| MRF | Territory Sales | 2 | MBA | Business |
| | Supervisor | | | Administration |
| Perfetti Van Melle | Sales DSE | 1 | MBA | Business |
| | | | | Administration |
| SBI Life Insurance | Sales | 5 | MBA | Business |
| | | | | Administration |
| SRVA Education | Assistant Manager | 3 | MBA | Business |
| | (Admission) | | | Administration |
| Teach for India | Fellow | 1 | M.Sc | Environmental |
| | | | | Science/ |
| | | | | Sociology/Linguistics |
| UDAAN | Area lead Sales | 3 | MBA | Business |
| | | | | Administration |
| Vodafone idea Limited | Management Trainee/ | 3 | MBA | Business |
| | Territory Sales Manager | | | Administration |
| Edelweiss Wealth | Wealth Manager | 1 | MBA | Business |
| Management | | | | Administration |
| TATA Consultancy | Management Trainee | 3 | MBA | Business |
| Services | | | | Administration |
| Vivekananda Kendra | Teacher | 5 | Int.B.Sc | Chemistry/ Education |
| Vidyalayas | | | B.Ed/B.Ed | |
| Federal Bank | Junior Management | 2 | M.Com | Commerce |
| | Grade | | | |
| Accenture | Application | 2 | Int.M.Com/ | Commerce |
| | Development Associate | | M.com | |
| MSL Group | Intern/ Management | 2 | M.A | Mass Communication |
| | associate | | | & Journalism |
| Aurigene | Technical Trainees | 4 | Int M.Sc/ | Chemical Science |
| Pharmaceutical Service | | | M.Sc | |

Officers and Staff Members

| Designation | Name | <email></email> | Date of holding the |
|--------------------------------|-----------------------|-----------------|---------------------|
| | | @tezu.ernet.in | current position |
| Professor in charge | Prof. Chandan Goswami | chand | 28-03-2022 |
| Training and Placement Officer | Deena Davy | deena | 09-08-2012 |
| Office Assistant | Sidhant Saikia | tnp | 26-04-2021 |

REPORT OF THE DEAN, SCHOOL OF ENGINEERING

About the School

The School of Engineering (SoE) of Tezpur University was established in the year 2006 with the introduction of B.Tech. programmes in three disciplines. There are now nine Departments in the School of Engineering:

- CE (Civil Engineering)
- CSE (Computer Science and Engineering)
- ECE (Electronics and Communication Engineering)
- EE (Electrical Engineering)
- FET (Food Engineering and Technology)
- ME (Mechanical Engineering)
- Energy
- Design
- Applied Science

Six constituent Departments (CE, CSE, ECE, EE, FET and ME) of the school are offer B.Tech programmes, while the Departments of CSE, ECE, ME, FET, ENERGY and CE are offer Master of Technology programmes also. MCA programme is also offered by the CSE Department. Except the Departments of Electrical Engineering, Design and Applied Science, all other Departments offer PhD programmes also. This school strives to produce skilled professionals at UG, PG, and Doctoral levels. The Departments are actively pursuing externally funded research projects, and both faculty and students are engaged in developing innovative technologies.

The school has been proactive in strengthening the teaching and learning experiences of students to enhance the knowledge and employability of its graduates. The school has judiciously used the funds received from the AICTE-NEQIP grant in developing and augmenting classroom and laboratory facilities and enhancing faculty quality so that the overall learning process is able to keep pace with the changing global scenario of technical education.

| Department | Academic Programmes Offered | Student Intake |
|----------------------------------|---|----------------|
| Civil Engineering | B.Tech | 68 |
| | M.Tech | 11 |
| | PhD | Variable |
| Computer Science and Engineering | B.Tech | 68 |
| | M. Tech. (CSE) | 18 |
| | M. Tech. (IT) | 18 |
| | MCA | 60 |
| | PhD | Variable |
| Electronics and Communication | B.Tech | 68 |
| Engineering | M.Tech in Electronics Design & Technology | 35 |
| | M.Tech in Bioelectronics | 19 |
| | PhD | Variable |
| Electrical Engineering | B.Tech | 38 |
| | PhD | Variable |
| Food Engineering and Technology | B.Tech | 56 |
| | M.Tech | 23 |

Departments and Academic Programmes Offered

Tezpur University :: Annual Report 2021-22 (Dean, School of Engineering)

| | PhD | Variable |
|------------------------|--------------------------|----------|
| Mechanical Engineering | B.Tech | 68 |
| | M.Tech | 22 |
| | PhD | Variable |
| Energy | M.Tech | 35 |
| | PhD | Variable |
| Design | M.Des (Master of Design) | 10 |
| Applied Science | Ph.D | Variable |

Important Activities

During this reporting period, due to the COVID-19 pandemic, many significant works and activities could not been performed practically. Some important activities organized in the school are mentioned below:

- Total 07 students have enrolled for AICTE Doctoral Fellowship (ADF) of the academic year 2021-2022
- One Ph.D Scholar admitted under the QIP Scheme for the academic year 2021-2022.
- Total 218 students from the different streams of the School of Engineering 2021-22 batch have been recruited by 41 companies.
- Total 06 Workshops related to career counseling were organized by the Training & Placement Cell of SoE.
- Total 07 technical training session were organized by the Training & Placement Cell of SoE.

| Designation | Name | Highest Qualification (Institute) | <email> @tezu.ernet.in</email> | Date of holding the current position |
|-------------------------|----------------|--------------------------------------|------------------------------------|--|
| Sr. Technical Assistant | Jibon C. Das | Diploma (SCTE, Assam) | djibon | 27-07-2012 |
| DC | Uttam Roy | MA (Tezpur University) | uttamroy | 11-07-2014 |
| MTS | Durlav Mahanta | | duma | 20-05-2013 |

Officers and Staff Members

DEPARTMENT OF APPLIED SCIENCES

About the Department

The Department of Applied Sciences was established in 2019. It aims to provide high-quality teaching of basic science subjects to engineering students. The teachers are dedicated to provide individual attention to the students to develop a strong foundation for their respective future careers by nurturing their analytical abilities and critical thinking. The department provides well-equipped laboratory facilities to the students as a part of their curriculum. The department aspires to establish its name in research with world-class and high-impact outputs in the frontiers of applied sciences in interdisciplinary areas. Notably, the department possesses some highly motivated junior faculty members with research experience from various premier institutes in India and abroad. Their research interests encompass diverse areas of applied and fundamental sciences, spanning fields like astrophysics, condensed matter physics, materials chemistry, and pure and applied mathematics. The faculty members are currently focused on establishing their own research groups to pursue research on their respective thrust areas.

Academic Programmes and Student Intake

| Academic Programme | Student Intake | |
|--------------------|-----------------------------------|--|
| Ph.D. | Variable (admitted 06 in 2021-22) | |

Thrust Research Areas of the Department/Centre

- Algebraic graph theory, operation research, harmonic analysis.
- Metal organic frameworks, porous organic polymers, polymer synthesis.
- High energy astrophysics, low-dimensional material physics.

Major Equipment available

- Immersion cooler.
- Frost free refrigerator.

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------------|--------------------------|---|---|------------------------------------|---|
| Professor | Rajib Haloi | Ph. D. (IIT, Kanpur) | Differential Equations, Harmonic Analysis. | rhaloi | 16-12-2021 |
| Associate Professor | Dhrubajyoti Haloi | Ph. D. (IIT, Kharagpur) | Polymer Synthesis & Characterization, Chemical Modification of Polymer, Polymer Composite. | djhaloi | 24-03-2022 |
| | Bijoy Krishna Debnath | Ph. D. (NIT, Agartala) | Operations Research | bijoy91 | 26-11-2019 |
| Assistant Professor | Somnath Paul | Ph. D. (Tezpur University) | Spectral Graph Theory | som | 09-08-2021 |
| | Saona Seth | Ph. D. (IIT, Kanpur) | Functional organic and metal-organic polymers, energetic | saonas | 30-12-2019 |

| [| | | | | |
|---------|---------------|------------------|-------------------------|-----------------|------------|
| | | | materials, Materials | | |
| | | | for energy and | | |
| | | | environmental | | |
| | | | applications. | | |
| | | Ph. D. | Low-dimensional | pkgogoi | |
| | | (National | Material Physics, | | |
| | | University of | Optical Spectroscopy, | | |
| | Pranjal Kumar | Singapore) | Electron Energy Loss | | 06-01-2020 |
| | Gogoi | | Spectroscopy, | | 00 01 2020 |
| | | | Scanning | | |
| | | | Transmission Electron | | |
| | | | Microscopy. | | |
| | | Ph. D. | Theoretical modeling | biplobs | |
| | | (IIT, Guwahati) | of astrophysical flows, | | |
| | Biplob Sarkar | | study of X-ray | | 30-01-2020 |
| | Dipioo Sarkar | | binaries, X-ray data | | 30-01-2020 |
| | | | analysis and | | |
| | | | interpretation. | | |
| | Subhadip | Ph. D. | Computational | subh.raychaudh | 28-03-2022 |
| | Raychaudhuri | (University of | Biology, Biophysics, | uri@gmail.com | |
| | | Rochester) | Condensed Matter | | |
| | | | Physics & Material | | |
| | | | Science. | | |
| | Arijit Patra | Ph. D. | Reliability Theory, | arijitpatramath | 29-09-2021 |
| | | (Rajiv Gandhi | Stochastic Ordering | @gmail.com | |
| | | Institute of | and Ageing. | | |
| | | petroleum | | | |
| | | Technology,Uttar | | | |
| Guest | | Pradesh) | | | |
| Faculty | Jutirekha | Ph. D. | Algebra and Graph | jutirekha | 16-01-2021 |
| | Dutta | (Tezpur | Theory | | |
| | | University) | | | |
| | Nand Kishor | Ph. D. | Atmospheric | nkgour1 | 01-10-2021 |
| | Gour | (Deen Dayal | Chemistry & | | |
| | | Upadhyay | Catalysis. | | |
| | | Gorakhpur | | | |
| | | University) | | | |
| | Rasna Devi | Ph. D. | Catalysis, Inorganic | rasna | 01-10-2021 |
| | | (Tezpur | synthesis and | | |
| | | University) | application. | | |

Officers and Staff Members

| Designation | Name | <email></email> | Date of holding the |
|-----------------------------------|-----------------|-----------------|---------------------|
| | | @tezu.ernet.in | current position |
| Technical Assistant (Contractual) | Janardan Boruah | jboruah | 27-10-2021 |
| Technical Assistant (Contractual) | Udeshna Sharma | udeshna | 27-10-2021 |

Major Research and Development Findings

| Faculty/ | Salient Research Findings |
|-----------------|---|
| Researcher | |
| Dr. Bijoy | Developed a fuzzy economic production quantity (FEPQ) inventory model of |
| Krishna Debnath | sustainable items with time and stock dependent demand under trade credit policy. |

| Dr. Saona Seth | Our research group has developed a number of porous organic and metal-organic polymers with tunable functionalities and porosity for applications in chemical separation, catalysis etc. |
|----------------|---|
| Dr. Biplob | We have investigated the results of an observation of low mass X-ray binary GX 3+1 with AstroSat's Large Area X-ray Proportional Counter (LAXPC) and Soft X-ray Telescope (SXT) instruments on-board for the first time. We provide a new estimation of the source distance, which is ~ 9.3 ± 0.4 kpc, calculated for an isotropic burst emission. |
| Sarkar | We have also investigated the broadband results from the study of a neutron star low-mass X-ray binary 4U 1608-52, which was observed for an exposure time of around 40 ks with AstroSat. Our timing analysis revealed a positive correlation of the fractional r.m.s power with energy bands of increasing energies and also we found significant evolution in the photon index with the X-ray flux. |

Research Projects (both Ongoing and New)

| Project Title | Funding Agency | Amount | Duration | Investigator(s) |
|-------------------------------------|-------------------|------------|---------------|-----------------|
| | | (in INR) | | |
| Developing Polymers of Intrinsic | SERB-DST | 26.5 lakhs | December, | Dr. Saona Seth |
| Microporosity (PIMs) as Solid | | | 2020– ongoing | |
| Matrix for Potential Application in | | | | |
| Separations of Hydrocarbons | | | | |
| Molecular Level Engineering of | UGC | 10 lakhs | August, | Dr. Saona Seth |
| Polymers of Intrinsic Microporosity | | | 2020– ongoing | |
| to Modulate the Properties | | | | |
| Investigation of the accretion flow | Department of | 4.77 lakhs | November, | Dr. Biplob |
| properties of black hole binaries | Space, Government | | 2020– ongoing | Sarkar |
| with AstroSat | of India | | | |
| Spectrum of magnetized dissipative | UGC | 8 lakhs | December, | Dr. Biplob |
| accretion flow around a rotating | | | 2021– ongoing | Sarkar |
| black hole with thermal conduction | | | | |
| and hydrodynamical winds | | | | |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Pal, S., and Haloi, R. (2021). Existence and uniqueness of solutions to the damped Navier-Stokes equations with Navier boundary conditions for three-dimensional incompressible fluid, *Journal of Applied Mathematics and Computing*, 66 (1), 307-325.
- Debnath, B.K, Majumder, P., and Bera, U.K. (2021). A fuzzy economic production quantity model of sustainable items with time and stock dependent demand under trade credit policy. *International Journal of Operations research*, 41(1): 27-52.
- Paul, S. (2022). Distance Laplacian spectra of joined union of graphs. *Asian-European Journal of Mathematics*, 15 (2): 2250039.
- Das, B., Sarkar, B., and Nath, A. (2021). Looking At The High-energy X-ray Universe- An Overview. *Journal of the Maharaja Sayajirao University of Baroda*, 55(2):224-231.
- Yu, S. H., Gogoi, P. K., Rath, A., Dai, H., Cavin Ng, Z. Q., Suenaga, K., Pennycook, S. J. and Chua, D. H. C. (2021). In-situ Derived Highly Active NiS₂ and MoS₂ Nanosheets on NiMoO₄ Microcuboids via Controlled Surface Sulfidation for High-current-density Hydrogen Evolution Reaction, *Electrochimica Acta*, 389: 138733.
- Mondal, B. and Gogoi, P. K. (2022). Nanoscale hetero-structured materials based on metal oxides for chemiresistive gas sensor, *ACS Applied Electronic Materials*, 4(1):59-86.

Publication of Books

• Paul, S. (2021). *Combinatorics And Graph Theory- Notes & References*. Purbayon Publications, Guwahati, India, 1st edition.

Publication of Book Chapters

- Paul, S. (2022). A note on integral graphs, *Current Topics in Mathematics*, pages 260–266, ISBN:978-93-91064-75-4, Mahaveer Publications, Dibrugarh, Assam.
- Sarkar, B. (2022). An Effective Curriculum and Activity Based Teaching-learning in College Education, In Sahu, N., and Khare, P. S., editors, *Emerging Trends and Research in Educational Technology*, pages 137-145, ISBN:978-93-91002-99-2, ABS Books, Delhi-110086.

| Name of Faculty/Staff Member | Purpose of Attending | Title of Event | Date/ Period | Organizer and Venue |
|------------------------------------|--------------------------------|--|---------------------------------|--|
| Pranjal Kumar Gogoi | Co- Convenor (Organizer) | Workshop on Importance of Japanese Language for Indian Students | 13-07-2021 | Indian JSPS Alumni Association & Tezpur University (Online) |
| | Session Chairing | Emerging Trends in High Energy Astrophysics (ETHEAP) | 16-03-2022 | Department of Applied Sciences, Tezpur University in collaboration with Indian Association of Physics Teachers (IAPT) RC-17 as a part of Prof. D. P. Khandelwal Birth Centenary Celebrations (Online) |
| | Oral | National Conference on Current Perspectives of Environmental Science and Technology | 01-03-2022 | Department of Environmental Science, Tezpur University in association with inSCIgnis 2022, Tezpur University |
| Biplob Sarkar | Paper presentation | National Conference on Emerging Trends in Physics (NCETP 2021) | 16-06-2021 | Department of Physics, Tezpur University, Assam, India (Online) |
| | Paper presentation | National Conference on "Emerging Trends in Physical Sciences (ETPS- 2021)" | 27-09-2021 to 01-10- 2021 | Department of Physics, ICFAI Science School, The ICFAI University Tripura (Online) |
| | Paper presentation | National Conference on "Advanced Materials, Technology, Applications Education" [AMTAE- 2021] | 16-10- 2021 | Department Of Physics, Hon. Balasaheb Jadhav Arts, Commerce & Science College, Ale, Pune (Online) |
| | Paper presentation | 27th International Conference of International Academy of Physical Sciences on Advances in Relativity and Cosmology | 26-10-2021 to 28-10- 2021 | Department of Mathematics, Birla Institute of Technology and Science Pilani, Hyderabad Campus, Hyderabad, India (Online) |
| | Paper presentation | North-East Meet Of Astronomers-VII | 27-01- 2022 to 29-01- | Department Of Physics, Rajiv Gandhi University, Rono Hills, Arunachal Pradesh in |

Conference/Workshop/Symposium/Seminar etc. Attended

| | | | 2022 | Association with Inter |
|--------------|--------------|--------------------------|------------|----------------------------------|
| | | | 2022 | University Centre for |
| | | | | Astronomy and Astrophysics |
| | | | | (IUCAA), Pune (Online) |
| | Paper | 21st National Space | 31-01-2022 | IISER Kolkata, India (Online) |
| | presentation | Science Symposium | to 04-02- | HSER KOIKata, India (Onnie) |
| | presentation | Science Symposium | 2022 | |
| | Paper | One Day National | 01-03-2022 | Department of Physics in |
| | presentation | Symposium on the | 01 05 2022 | association with inSClgnis '22, |
| | presentation | occasion of National | | Tezpur University, Assam, India |
| | | Science Day | | (Offline) |
| | Convener | Emerging Trends in High | 16-03-2022 | Department of |
| | | Energy | | Applied Sciences, Tezpur |
| | | Astrophysics | | University in collaboration with |
| | | (ETHEAP) | | Indian |
| | | | | Association of Physics Teachers |
| | | | | (IAPT) RC-17 as a part of Prof. |
| | | | | D. P. Khandelwal Birth |
| | | | | Centenary Celebrations |
| | | | | (Online) |
| Somnath Paul | Paper | 36th Annual Conference | 05-08-2021 | Department of Mathematics, |
| | presentation | of Ramanujan | to 07-08- | Amrita Vishwa Vidyapeetham, |
| | | Mathematical Society | 2021 | Coimbatore, India |
| | Paper | Weekly seminar on | 16-07-2021 | Department of Mathematics, IIT |
| | presentation | "Graphs, Matrices and | | Kharagpur, Kharagpur, West |
| | | Applications" | | Bengal. |
| | Paper | International Conference | 14-03-2022 | Department of Mathematics, |
| | presentation | on Algebra and Discrete | to 15-03- | Fatima Mata National College |
| | | Mathematics, ICADM- | 2022 | (Autonomous), Kollam, Kerala, |
| | | 2022 | | India. |
| | Paper | International Conference | 02-03-2022 | Department of Mathematics, |
| | presentation | on Mathematical | to 04-03- | The Gandhigram Rural Institute |
| | | Modelling, Applied | 2022 | (Deemed to be University), |
| | | Analysis and | | Gandhigram, Tamil Nadu, India |
| | | Computational | | |
| | | Intelligence | | |
| | | (ICMMAACI-2022) | | |

Invited Talk

| Name of Faculty Member | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|------------------------------|--|--|------------|---|
| Rajib haloi | Brief introduction to functional differential equations | Departmental seminar | 22-03-2022 | Dept. of Mathematics, Tihu college, Assam. |
| Pranjal Kumar Gogoi | Watching and Understanding the Atomic World Using Electrons | Orientation Program for B.Tech. Students (2021) | 27-10-2021 | Girijananda Chowdhury Institute of Management and Technology, Guwahati (Lecture was delivered online) |
| Somnath Paul | Integral Graphs- History & Recent developments | Departmental seminar | 01-03-2022 | Division of Mathematics, School of Advanced Sciences, Vellore Institute |

| | | | | of Technology, Chennai, Tamil Nadu |
|----------|--|----------------------|------------|---|
| | Graph Theory - Introduction and Applications | Departmental seminar | 04-03-2022 | Association of Mathematics, Shift-II, Sacred Heart College (Autonomous), Thirupatur, Tamil Nadu. |
| Saona | Towards | 1st International | 29-07-2021 | School of Chemical |
| Seth | Development of | Conference on | to 30-07- | Sciences, NISER |
| | Tailored Energetic | Emerging Porous | 2021 | Bhubaneswar in association |
| | Materials Utilizing | Materials | | with VIT Vellore and IIT |
| | the Chemistry of | | | Jammu |
| | Coordination | | | |
| | Polymers | | | |
| Bijoy K. | Magic of Geometry | Popular talk | 28-12-2021 | Tripura Mathematical |
| Debnath | in Algebra | | | Association (TMA), |
| | | | | Agartala, Tripura. |

Awards/Honours/Notable Achievements

| | Designation of Awardee | Achievement | Event/Awarded by |
|--------|---------------------------|-----------------------------|--|
| Biplob | Faculty | Received Life Membership | Astronomical Society of India, Regd. Office: |
| Sarkar | member | of the Astronomical Society | Department of Astronomy, Osmania |
| | | of India | University, Hyderabad-500 007, India |

Other Significant Activities of the Department

- 1-day Online Conference on Emerging Trends in High Energy Astrophysics (ETHEAP) organized by The Department of Applied Sciences, Tezpur University in collaboration with Indian Association of Physics Teachers (RC -17) As a part of Prof. D.P. Khandelwal Birth Centenary Celebrations on March 16th, 2022.
- Two days international conference on "Emerging trends in pure and applied Mathematics" organized by Department of Applied Sciences in association with Department of Mathematical Sciences held during March 12-13, 2022, in blended mode.

DEPARTMENT OF CIVIL ENGINEERING

About the Department

The department of Civil Engineering of Tezpur University was established in 2009 under the School of Engineering to offer B. Tech. Degree. A Ph.D. Programme was started in the spring of, 2011, and the M. Tech. Programme of the department was started in Autumn 2018. The Department aims to provide quality education, research and professional experiences that enable its graduates to become leaders in their professional careers, pursue excellence in research, serve the profession, community and nation, and compete internationally.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|--------------------|----------------|
| B.Tech | 68 |
| M.Tech | 11 |
| Ph.D. | Variable |

Thrust Research Areas of the Department

Development of methods/ techniques which are easily acceptable and adaptable to communities at an affordable cost especially for the people living in rural and semi-urban areas of Northeastern Region of India in terms of

- Safe drinking water, sanitation
- Roads, soil stabilization
- Landslide mitigation, riverbank protection

Major Facilities/Equipment available

The Department has the following Laboratory facilities

- Computational Laboratory
 - MatLab and Simulink R2011b
 - Civil FEM for Ansys,
 - version 12.1 Plaxis 2D
 - ETABS Version 9
 - AutoCAD
 - SAP 2000, v-20
- Core Departmental Laboratories
 - Geotechnical Engg. Laboratory-I
 - Consolidation Apparatus
 - Triaxial Apparatus
 - Pore Pressure Apparatus
 - Laboratory Vane Shear Apparatus
 - In-Situ Vane Shear Apparatus
 - Swell Test Apparatus
 - Electronic Balance
 - Laboratory Permeability Apparatus
 - Relative Density Apparatus
 - Drying Oven
 - Shrinkage Limit Testing Apparatus

- Moisture Meter
- Consolidation Apparatus (with three gang)
- Motorized Sieve Shaker
- Standard Penetration Test Set up
- Environmental Engg. Laboratory -I
 - pH Meter
 - Conductivity Meter
 - Turbidity Meter
 - Spectrophotometer
 - Flame Photometer
 - Jar Test Apparatus
 - COD Reactor
 - BOD Incubator
 - Magnetic Stirrer with Hot Plate
 - Drying Oven
 - High Sensitivity Balance
 - Refrigerator
 - Muffle Furnace
- Water Resources Laboratory
 - Hydraulics Bench
 - Cavitation Apparatus
 - Laminar Flow Table
 - Darcy's Law Apparatus
 - Reynolds's Apparatus
 - Orifice & Mouthpiece
- Structural Engg. & NDT Laboratory
 - Compression Testing Machine
 - Sieve Shaker
 - Vicat Apparatus
 - Compaction Factor Apparatus
 - Desiccators
 - Slump Test Apparatus
 - Le Chatelier Apparatus
 - Specific Gravity Bottle
- Transportation Engg. Laboratory
 - CBR Machine
 - Ring & Ball Apparatus
 - Aggregate Crushing Value Apparatus
 - Hot Plate
 - Ductility Testing Machine
 - Los Angeles Abrasion Testing Machine
 - Impact Testing Machine

- Surveying Laboratory:
 - Total Station
 - Electronic Theodolite
 - Vernier Theodolite
 - Autolevel
 - Digital Planimeter
 - Plane Table and accessories
 - Prismatic compass
 - Measuring chain
 - Measuring Tape
 - Ranging rod
 - Cross staff
- Geotechnical Engg. Laboratory-II
 - Direct Shear Apparatus
 - Unconfined Compression Apparatus
- Environmental Engg. Laboratory-II
 - Atomic Absorption Spectrophotometer
 - UV-Visible Spectrophotometer

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------------|-------------------------------|--------------------------------------|--|------------------------------------|---|
| Professor | Utpal Kumar Das | Ph.D. (Gauhati University) | Geotechnical Engineering | ukrdas | 26-08-2015 |
| Associate Professor | Kamal Uddin Ahamad | Ph.D. (IIT Guwahati) | Environmental Engineering | kahamad | 18-11-2019 |
| | Ankurjyoti Saikia | Ph.D. (Tezpur University) | Geotechnical Engineering | asaikia | 01-10-2009 |
| | Binanda Khungur Narzary | Ph.D. (Tezpur University) | Transportation Engineering | binanda | 10-08-2012 |
| | Debaraj Bailung Sonowal | M.Tech (IIT Roorkee) | Structural Engineering | bailing | 16-08-2012 |
| | Shailen Deka | Ph.D. (IIT Guwahati) | Geotechnical Engineering | deka.s | 03-09-2012 |
| Assistant Professor | Jayanta Deori Bharali | M.Tech (IIT Guwahati) | Transportation Engineering | jdb | 25-08-2014 |
| | Rituraj Buragohain | M.Tech (IIT Guwahati) | Water Resources Engineering | rbgn | 16-01-2017 |
| | Karabi Bharadwaj | M.Tech (NIT Silchar) | Structural Engineering | karabi | 03-04-2017 |
| | Arunav Chakraborty | Ph.D. (Gauhati University) | Geotechnical Engineering | aru243 | 18-11-2019 |
| | | Ph.D (IIT Kanpur) | Hydraulics and water resources engineering | hmedhi | 29-11-2021 |

| Guest Faculty | Moumita Goswami | M.Tech (Tezpur University) | l (t eotechnical | moumitagoswa mi65@gmail.co m | 11-02-2022 |
|------------------|--------------------|-------------------------------|------------------------------|------------------------------------|------------|
|------------------|--------------------|-------------------------------|------------------------------|------------------------------------|------------|

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the |
|----------------------|----------------------|-------------------------------|---------------------|
| | | | current position |
| Technical Officer | Chirajyoti Doley | chirajd | 22-08-2012 |
| | Iseng Thawmung | iseng | 01-10-2010 |
| Technical Assistant | Puspajyoti Kalita | pjk | 11-07-2011 |
| | Jahnu Baruah | jahnu | 22-08-2011 |
| Lower Division Clerk | Parama Nanda Chauhan | chauhan | 01-06-1995 |
| Multi Tasking Staff | Dipak Deka | dipak2 | 31-12-1995 |

Major Research and Development Findings

| Faculty/ | Salient Research Findings | | | | |
|-----------------------------------|--|--|--|--|--|
| Researcher | | | | | |
| Dr. Kamal Uddin Ahamad | Estimation of Equivalent Modulus of Fine-Grained Subgrade Soil from Numerical Model. Dual Mode Smartphone Based Sensing for Accurate Estimation of Sulphate and Chloride in Water. Prediction of Lake Eutrophication using ANN and ANFIS by artificial simulation of Lake Ecosystem. Lake Eutrophication: Causes, Concerns and Remedial Measures. | | | | |
| Dr. Binanda Khungur Narzary | Estimation of Equivalent Modulus of Fine-Grained Subgrade Soil from Numerical Model. Prediction of Lake Eutrophication using ANN and ANFIS by artificial simulation of Lake Ecosystem. | | | | |
| Dr. Utpal Kumar Das | Response of Square Footing on Geocell-Reinforced Sand Bed Under Static and Repeated Loads. Load-Settlement Behaviour of Geotextile-Based Geocell Reinforced Sand Bed. | | | | |
| Ms. Karabi Bharadwaj | Parametric Study on the Variation of Time Period of RC MRF Buildings. Comparative Study on Static and Dynamic Analysis of RC Buildings of Different Heights in Different Seismic Zones. | | | | |
| Dr. Arunav Chakraborty | Prediction of California Bearing Ratio (CBR) from Index Properties of Fine-Grained Soil. The Application of Statistics and Fuzzy Logic in Predicting Slope Stability. | | | | |
| Dr. Hemanta Medhi | • A Methodological Comparison on Spatiotemporal Prediction of Criteria Air Pollutants. | | | | |

Research Projects (both Ongoing and New)

| Project Title | Funding | Amount | Duration | Investigator(s) |
|--------------------------------------|----------------|-----------|----------|-----------------------|
| | Agency | (in INR) | | |
| Development of plastiminous | AICTE under | 18,40,000 | 3 years | Dr. Binanda K. |
| concrete from waste plastic for road | RPS-NER | | - | Narzary and Dr. |
| construction in Northeast India | Scheme | | | Kamal Uddin Ahamad |
| Response of Geocell Reinforced | AICTE-Major | 20,75,000 | 3 years | Prof. Utpal Kumar Das |
| Soil Foundation under Static and | Research | | - | _ |
| Cyclic Loading | Project | | | |
| | - | | | |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Narzary, B. K. and Ahamad K. U. (2021). Estimation of Equivalent Modulus of Fine-Grained Subgrade Soil from Numerical Model. *Journal of Transportation Engineering, Part B: Pavement*. https://doi.org/10.1061/JPEODX.0000246.
- Hatiboruah, D., Talukdar, B., Ahamad, K.U., and Nath, P. (2021). Dual Mode Smartphone Based Sensing for Accurate Estimation of Sulphate and Chloride in Water. *IEEE Sensors Journal*. https://doi.org/10.1109/JSEN.2021.3088502.
- Bhagowati, B., Talukdar, B., Narzary, B.K., and Ahamad, K.U. (2022). Prediction of Lake Eutrophication using ANN and ANFIS by artificial simulation of Lake Ecosystem. *Modeling Earth Systems and Environment*. https://doi.org/10.1007/s40808-022-01377-8
- Singh, P., Vaishya, R.C., Soni, P. and Medhi, H. (2022). A Methodological Comparison on Spatiotemporal Prediction of Criteria Air Pollutants. *Asian Journal of Atmospheric Environment*. https://doi.org/10.5572/ajae.2021.087
- Chakraborty, A. and Goswami, A. (2021). Prediction of California Bearing Ratio (CBR) from Index Properties of Fine-Grained Soil. *Geotechnical Engineering Journal*. 52(4), pp. 57-64.
- Doley, C., Das, U.K., and Shukla, S. (2021). Response of Square Footing on Geocell-Reinforced Sand Bed Under Static and Repeated Loads. *International Journal of Geosynthetics and Ground Engineering*. https://doi.org/10.1007/s40891-021-00336-0
- Doley, C., Das, U.K., and Shukla, S. (2022). Load-Settlement Behaviour of Geotextile-Based Geocell Reinforced Sand Bed. *Geotechnical Engineering Journal*. 53(1), pp. 11-17.

Publication of Book Chapters

- Bhagowati, B., Talukdar, B., and Ahamad K. U. (2021). Lake Eutrophication: Causes, Concerns and Remedial Measures. In *Emerging Issues in the Water Environment during Anthropocene*, pages 211–222, Springer.
- Saharia, R., Bhuyan, D., Chowdhury, S., Bharadwaj, K. (2022). Comparative Study on Static and Dynamic Analysis of RC Buildings of Different Heights in Different Seismic Zones. In *Recent Advances in Earthquake Engineering*. Springer.
- Sarma, S., Sundar Das, T., Bora, A., Bharadwaj, K. (2022). Parametric Study on the Variation of Time Period of RC MRF Buildings. In *Recent Advances in Earthquake Engineering*. Springer.
- Chakraborty, A., and Goswami, A. (2022). The Application of Statistics and Fuzzy Logic in Predicting Slope Stability. In *Recent Advances in Civil Engineering*, pages 137–147, Springer.

| Name of | Purpose of | Title of Event | Date/Period | Organizer and Venue |
|-----------------------------------|------------------------|---|-----------------------------|--|
| Faculty/ Staff Member | Attending | | | (Online/Offline) |
| Dr. Arunav Chakraborty | Paper- presentation | Sustainable Construction Technologies and Advancements in Civil Engineering, ScTACE 2021 | 14-10-2021 to 16-10-2021 | Department Of Civil Engineering, Shri Vishnu Engineering College For Women (Online) |
| Mr. Debaraj Bailung Sonowal | Participation | Feasibility of stone dust as a construction material for affordable housing | 22-05-2022 to 22-05-2022 | IIT Guwahati (Offline) |

Conference/Workshop/Symposium/Seminar etc. Attended

| Invited Talk | | | 1 | |
|--------------|-------------------------|------------------------|------------|--------------------------|
| Name of | Title of the Talk | Title of the Event | Date | Organizer and Venue |
| Faculty | | | | |
| Member | | | | |
| Dr. Arunav | Soil Testing and | "One-day Regional | 13-09-2021 | Government of Assam |
| Chakraborty | Foundation designing | Training on Pipeline | | Office of The Executive |
| | | Material and its types | | Engineer (PHE): Tezpur |
| | | with special focus on | | Division No. I: Tezpur |
| | | HDPE-reg" | | (Online) |
| | Soil Exploration and | One Day National Level | 22-03-2022 | Department of Civil |
| | In-Situ Testing | Technical Webinar | | Engineering, St. Joseph |
| | | | | University, Nagaland |
| Dr. Hemanta | Estimation of flood | Drought and Flood | 18-04-2022 | Department of Civil |
| Medhi | quantile incorporating | Analysis and their | | Engineering, MNNIT |
| | stream network | Management (DAM- | | Allahabad |
| | connection information | 2022) | | & National Institute of |
| | | | | Disaster Management, |
| | | | | Govt. of India, New |
| | | | | Delhi |
| | | | | Venue: MNNIT |
| | | | | Allahabad (Online) |
| | Flood Estimation and | Disaster Management | 07-03-2022 | National Institute of |
| | Protection Techniques | and Sustainable | | Technical Teachers |
| | | Development | | Training & Research, |
| | | | | Chandigarh (Online) |
| Mr. Debaraj | Earthquake resistant | Seminar on Work | 15-12-2021 | Military station, Tezpur |
| Bailung | design and construction | Management and Re | | |
| Sonowal | | Invigorating the PMGs | | |
| Dr. Shailen | Cost Benefit Analysis | Seminar on Work | 15-12-2021 | Military station, Tezpur |
| Deka | & Re-invirogating the | Management and Re | | |
| | aspect of Project | Invigorating the PMGs | | |
| | Management | | | |

Awards/Honours/Notable Achievements

| Name of | Designation of Awardee | Achievement | Event/Awarded by |
|-------------|------------------------|-------------|--|
| Awardee | | | |
| Dr. Arunav | Faculty Member | Best paper | Sustainable Construction Technologies |
| Chakraborty | | award | and Advancements in Civil Engineering, |
| | | | ScTACE 2021. Awarded by Department |
| | | | of Civil Engineering, Shri Vishnu |
| | | | Engineering College For Women. |

Other Significant Activities of the Department

- Poster presentation competition on "Good Academic Research Practices" for B. Tech, M. Tech and Ph.D. on 30-11-2021.
- One-Day Poster Presentation Event on Recent Trends in Civil Engineering for B. Tech, M. Tech on 23-05-2022.
- 3-Day Student Workshop on Surveying and Designing of Road & Dept. of Civil Engineering for B. Tech from 09-03-2022 to 11-03-2022.

Invited Talk

• 3-Day Skill development programme on Field Surveying Techniques for B. Tech from 06-12-2021 to 08-12-2021.

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|--------------------|
| GATE | 17 | B. Tech |

Notable Placement of Students

| Name of Student | Academic | Placement | Company/ | Mode of |
|------------------------|-----------|--------------------|------------------------------|------------|
| | Programme | Designation | Organization | Selection |
| Sahanur Islam | B. Tech | Technical officer | Jal Jeevan | Off-Campus |
| Prerana Sarmah | B. Tech | Technical officer | Jal Jeevan | Off-Campus |
| Ansuman Kakati | B. Tech | Technical officer | Jal Jeevan | Off-Campus |
| Angshuman Nath | B. Tech | Technical officer | Jal Jeevan | Off-Campus |
| Ankita Bora | B. Tech | Technical officer | Jal Jeevan | Off-Campus |
| Rajdeep Saharia | B. Tech | Technical officer | Jal Jeevan | Off-Campus |
| Tuhinangshu Bhuyan | B. Tech | Technical officer | Jal Jeevan | Off-Campus |
| Abhisekh Barah | B. Tech | Programmer Analyst | Cognizant | On-Campus |
| Shraddha Sinha | B. Tech | | KEC International Ltd | On-Campus |
| Sneha Talukdar | B. Tech | | KEC International Ltd | On-Campus |
| Kumkum Bhuyan | B. Tech | | KEC International Ltd | On-Campus |
| Dheeraj Malviya | B. Tech | Project Engineer | Wipro | On-Campus |
| Atul Mehta | B. Tech | Programmer Analyst | Cognizant | On-Campus |
| Vepuri Shalom Christie | B. Tech | Management trainee | Saint-Gobain | On-Campus |
| Animesh Anand | B. Tech | Project Engineer | Wipro | On-Campus |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic Programme (in TU) | Name of other Institute | Enrolled Academic Programme |
|---------------------|-------------------------------|----------------------------|--------------------------------|
| Tridib Sundar Das | B. Tech | NIT Silchar | M. Tech |
| Rajibul Awal | B. Tech | Zamia Millia Islamia | M. Tech |
| Shemin A. Majumder | B. Tech | NIT Silchar | M. Tech |
| Abhisekh Barah | B. Tech | IIM Amritsar | MBA (in Business Analytics) |
| Vinay Panwar | B. Tech | NITK Surathkal | M. Tech |
| Parishmita K. Deori | B. Tech | NIT Silchar | M. Tech |

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

About the Department

The vision of the Department is to be a dedicated centre of learning and research in computer science and engineering. It is committed to creating competent professionals capable of taking leading roles in industry, academia, and application areas of the field. A High-Performance Computing Centre was established in the Department in June 2015 to provide high-end computing facilities to scientific researchers from the North-East region. The Department has been recently recognized as a Centre of Excellence in Machine Learning and Big Data Analytics by MHRD, Government of India, under FAST. The Department is also recognized by UGC under Special Assistance Programme (SAP DRS Phase II). During 2005-2009 and 2018-2023 the Department received support from the Department of Science and Technology (DST), Govt. of India, under its FIST- Programme. The Department has also been recognized as an ISEA member, MeitY, GoI and BRICS-NU Member. The B. Tech. Programme of the Department of Computer Science & Engineering is accredited by the National Board of Accreditation (NBA).

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|--------------------|-----------------------------------|
| M.Tech (IT) | 28 |
| M Tech (CSE) | 18 |
| MCA | 45 |
| B Tech | 60 |
| Ph.D | Variable (admitted 12 in 2021-22) |

Thrust Research Areas of the Department

- Computer and Network Security
- Biomimetic & Cognitive Robotics
- Bioinformatics
- Machine learning and Soft computing
- Big Data Analytics
- Mobile and Wireless Networking
- Image Processing & Pattern Recognition
- Information Retrieval Systems
- Natural Language Processing
- Speech Processing
- Workflow analysis
- Computer Vision
- Algorithms and Optimization Techniques
- Software Defined Networking and Cloud Computing
- Cognitive Radio Networks
- 5G and B5G

Major Facilities/Equipment available

- High Performance Computing Center (Supercomputer "Param Shavak")
- Cluster Computing Facility with Storage
- Interactive Smart classroom
- Embedded System Trainer Lab (8085 & Arm) Processor Based (2 Nos)

- Benchmark Lan Trainer/I-Security
- IBM X3550 M3 Server
- AR / VR (Augmented Reality and Virtual Reality) Equipment
- USRP Device with different antennas
- IoT Equipments with Sensors

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------------|--------------------------------|---|---|------------------------------------|---|
| Professor | Dilip Kumar | PhD (IIT | Mobile Computing, | dks | 18-03-1997 |
| | Saikia | Kharagpur) | Computer Networks | | |
| | Dhruba Kumar | PhD (Tezpur | Machine Learning, | dkb | 14-06-2006 |
| | Bhattacharyya | University) | Network Security and Bioinformatics | | |
| | Smriti Kumar | PhD (Tezpur | Workflow Automation, | smriti | 13-09-2007 |
| | Sinha | University) | Semi-structured Databases | | |
| | Utpal Sharma | PhD (Tezpur | Natural Language | utpal | 16-12-2013 |
| | | University) | Processing | | |
| | Nityananda | PhD (IIT | Mobile Networks, | nitya | 09-03-2013 |
| | Sarma | Guwahati) | Networks Security | | |
| | Bhogeswar | PhD (Tezpur | Data Mining, Image | bgb | |
| | Borah | University) | Processing | | |
| | Sarat Saharia | PhD (Tezpur University) | Image processing, Pattern Recognition | sarat | 31-08-2016 |
| | Bhabesh Nath | PhD (Tezpur University) | Data Mining, Artificial Neural Network | bnath | 20-10-2020 |
| Associate Professor | Siddhartha Sankar Satapathy | PhD (Tezpur University) | Networking, Bioinformatics | ssankar | 26-08-2014 |
| | Sajib Kumar Deka | PhD (Tezpur University) | Computer Networks, Cognitive Radio Networks | skdeka | 18-0902019 |
| | Debojit Boro | PhD (Tezpur University) | Mobile Computing | deb0001 | 18-11-2019 |
| Assistant Professor | Rosy Sarmah | PhD (Tezpur University) | Data Mining | rosy8 | 24-08-2021 |
| 5 | S Ibotombi Singh | PhD (Tezpur University) | Data Mining | sis | 01-08-2004 |
| | L Basantakumar Singh | M. Tech (Tezpur) | Pattern Recognition | lbsingh | 15-01-2009 |
| | Arindam Karmakar | PhD (ISI, Kolkata) | Computational geometry | arindam | 10-08-2011 |
| | Sanghamitra Nath | PhD (Tezpur University) | Natural Language Processing, Data Mining | snath | 09-09-2011 |
| | Swarnajyoti Patra | PhD (Jadavpur University) | Pattern Recognition, Evolutionary Computing, Neural Networks | swpatra | 19-03-2013 |

| | Shobhanjana | PhD (Tezpur | Knowledge | kalitas | 06-01-2017 |
|---------|-----------------|------------------------|--------------------------|-----------------------------------|------------|
| | Kalita | University) | Representation & | | |
| | | | Reasoning | | |
| | Nabajyoti Medhi | PhD (NIT | Knowledge | nmedhi | 16-05-2017 |
| | | Meghalaya) | Representation & | | |
| | | | Reasoning | | |
| Guest | Monisha Devi | M. Tech | Cognitive Radio | magna | 17.01.2020 |
| Faculty | | (Tezpur University) | Networks | | |
| | Ramcharan | PhD (Tezpur | Network Security | rambaishyafromho wly@gmail.com | 03-09-2020 |
| | Baishya | University) | | | |
| | Md. Faiz lqbal | PhD | | faiziqbalfaiz066 | 24-09-2021 |
| | Faiz | (NERIST) | | @gmail.com | |
| | Habila | PhD (NIT | | habilabasumatar | 24-09-2021 |
| | Basumatary | Agartala) | | y6@email.com | |
| Adjunct | Jugal Kumar | PhD | Artificial Intelligence, | jkalita@uccs.edu | 20-02-2019 |
| Faculty | Kalita | (University of | Bioinformatics, | | |
| | | Pennsylvania, | Information Retrieval, | | |
| | | USA) | Computer Security | | |
| | Bhabani P Sinha | PhD | Microprogramming, | bhabani@isical.a | 20-02-2019 |
| | | (University of | Computer Arithmetic, | c.in | |
| | | Calcutta) | Fault Diagnosis, Graph | | |
| | | | Algorithms, Parallel | | |
| | | | Architectures and | | |
| | | | Algorithms, Wireless | | |
| | | | Networks & Mobile | | |
| | | | Computing | | |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the current position |
|----------------------|-----------------------|-------------------------------|--------------------------------------|
| System Analyst | Dr. Pranabjyoti Dutta | pjd | 01-02-1996 |
| | Dr. Rajib Goswami | rgos | 20-03-1997 |
| | Dr. Debasish Das | ddas | 06-06-1997 |
| Technical Officer | Gautam Kumar Das | gautamd | 05-08-2011 |
| Technical Assistant | Ajay Kumar Sharma | ajay | 27-09-2004 |
| Laboratory Assistant | Arun Chetri | arunch | 12-12-2007 |
| | Arup Kumar Sarkar | arupks | 07-09-2018 |
| Assistant | Pranati Boro | pranati | 27-09-1996 |
| MTS | Golap Baruah | golapb | 01-06-1995 |

Major Research and Development Findings

| Faculty/ Researcher | Salient Research Findings |
|---------------------|---|
| | 1. Segmented Gall Bladder CT images using rough entropy thresholding with |
| | contours, |
| | 2. Lung CT image segmentation of Covid patients and Identified Gallstones |
| Rosy Sarmah | and segmented gallbladder from Gall Bladder CT and USG images using |
| | Rough Density based Segmentation, |
| | 3. Devised a denoising method for CT images, |
| | 4. A Novel triclustering algorithm (PoPTric) for GST transcriptomic data, |

| | 5. Rank-preserving biclustering algorithm: a case study on miRNA breast |
|-------------------|---|
| | cancer |
| | Large scale inslico polymerphism analysis in tRNA genes revealed the role of |
| Siddhartha Sankar | the secondary structure of tRNA molecule is what drives the different |
| Satapathy | substitutions in its gene sequence. This finding is published in the journal of |
| | molecular evolution. |

Research Projects (both Ongoing and New)

| Project Title | Funding | Amount | Duration | Investigator(s) |
|---|--|--------------|-------------|--|
| | Agency | (in INR) | | |
| Development of Secured and Reliable Spectrum Allocation Schemes for Next-generation Elastic Optical Networks | MeitY, Govt. of India | 86,31,624.00 | 2021 - 2024 | Prof. N. Sarma Co-Investigator - Dr. S. K. Deka |
| Developments of semantic- aware structure preserving image filtering techniques | SERB | 38,87,664.00 | 2021 - 2024 | Dr. S Patra |
| Randiomics with Machine Learning Methods towards Prediction of Gall Bladder Cancer. | Indian Council of Medical Research (ICMR) | 18,07,448.00 | 2020 - 2022 | Dr. R. Sarmah Co Investigator - Dr. D. Boro |
| Ensuring QoS in Internet of Medical Things {IoMT) using Software-Defined Networking (SDN) | Tezpur University & MEITY | 36,39,433.00 | 2020 - 2022 | Dr. N. Medhi Co-Investigators - Prof. D.K. Saikia, Dr. S.K. Deka |
| Methods for the automatic generation of attribute profiles from hyperspectral data. | AICTE | 17,10,000.00 | 2019-2022 | Dr. S Patra |
| DST-FIST | DST, Govt of India | 44,00,000.00 | 2018-2023 | Prof. N. Sarma Co-Investigators - Dr. S. Saharia, Dr. S. K. Deka, Dr. S. S. Satapathy, Prof. U. Sharma |

Publications by Faculty and Staff Members Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Ahmed, S. A., and Nath, B. (2021). ISSP-tree: an improved fast algorithm for constructing a complete prefix tree using single database scan. *Expert Systems with Applications*, 185:115603.
- Ahmed, S. A., and Nath, B. (2021). Identification of adverse disease agents and risk analysis using frequent pattern mining. *Information Sciences*, 576:609-641.
- Borah, A., and Nath, B. (2021). An Efficient Method for Mining Rare Association Rules: A Case Study on Air Pollution. *International Journal on Artificial Intelligence Tools*, 30(4):2150018.
- Borgohain, U., Borkotokey, S., and Deka, S.K. (2021). A Coalition Formation Game for Cooperative Spectrum Sensing in Cognitive Radio Network under the Constraint of Overhead. *International Journal of Communication Networks and Information Security*, 13(3):431-438.
- Chauhan, P., Deka, S.K., Chatterjee, B.C., and Sarma, N. (2021). Utility driven cooperative spectrum sensing scheduling for heterogeneous multi-channel cognitive radio networks. *Telecommunication Systems*, 78(1):25-37.

- Chowdhury, H.A., Barah, P., Bhattacharyya, D.K., and Kalita, J.K. Identification of potential Parkinson's disease biomarkers using computational biology approaches. *Network Modelling Analysis in Health Informatics and Bioinformatics*, 10(1):1-16.
- Chowdhury, H.A., Bhattacharyya, D.K., and Kalita, J.K. (2021). UIFDBC: Effective densitybased clustering to find clusters of arbitrary shapes without user input. *Expert Systems with Applications*, 186. DOI: https://doi.org/10.1016/j.eswa.2021.115746.
- Chowdhury, H.A., Bhattacharyya, D.K., and Kalita, J.K. (2021). UICPC: Centrality-based clustering for scRNA-seq data analysis without user input. *Computers in Biology and Medicine*, 137:104820.
- Devi, M., Sarma, N., and Deka, S.K. (2021). A centralized model enabling channel reuse for spectrum allocation in cognitive radio networks. *Cybernetics and Information Technologies*, 21(2):183-200.
- Devi, M., Sarma, N., and Deka, S.K. (2021). A Double Auction Framework for Multi-Channel Multi-Winner Heterogeneous Spectrum Allocation in Cognitive Radio Networks. *IEEE Access*, 9: 72239-72258.
- Devi, M., Sarma, N., and Deka, S.K. (2021). Multi-Winner Spectrum Allocation in Cognitive Radio Networks: A Single-Sided Auction Theoretic Modelling Approach with Sequential Bidding. *Electronics*, 10(5):602.
- Devi, N., and Borah, B. (2021). A novel mutual information-based feature selection approach for efficient transfer learning in aerial scene classification. *International Journal of Remote Sensing*, 42(1):1-15.
- Hadem, P., Saikia, D.K., and Moulik. S. (2021). An SDN-based intrusion detection system using SVM with selective logging for IP traceback. *Computer Networks*, 191:108015. DOI: https://doi.org/10.1016/j.comnet.2021.108015.
- Hadem, P., Saikia, D.K., and Moulik.S. (2021). I-SMITE: an IP traceback mechanism for inter-AS SDN networks using BGP. *International Journal of Security and Networks*, 16(3):163-173.
- Hijam, D., and Saharia, S. (2022). On developing complete character set meitei mayek handwritten character database. *The Visual Computer*, 38(2):525-539.
- Hussain, M., Ahmed, N, Ahmed, M., Iqubal, Z., and Sarma, N. (2022). QoS Provisioning in Wireless Mesh Networks: A Survey. *Wireless Personal Communications*, 122(1):157–195.
- Kharkongor, C., and Nath, B. (2021). Itemset representation and mining the rules for huntington's dataset. *Emerging Science Journal*, 5(3):380-391.
- Mandal, K., Sarmah, R., Bhattacharyya, D. K., Kalita, J. K. and Borah, B. (2021). Rankpreserving biclustering algorithm: a case study on miRNA breast cancer. *Medical & Biological Engineering & Computing*, 59(4):989-1004.
- Mohanta, M.P., Behera, D., Das, D., Mishra, P.K., Satapathy, S.S., Patnaik, L., Badapanda, S., and Prakash, G. (2021). Is Immunomodulatory Property of Hydroxychloroquine Beneficial for Severe COVID-19? A Hospital Based Retrospective Observational Study. *Advances in Bioscience and Clinical Medicine*, 9(2):27-30.
- Patowary, P., and Bhattacharyya, D. K. (2021). PD_BiBIM: Biclustering-based biomarker identification in ESCC microarray data. *Journal of Biosciences*, 46(3):1-18.
- Patowary, P., Bhattacharyya, D.K., and Barah, P. (2022). SNMRS: An advanced measure for Coexpression network analysis. *Computers in Biology and Medicine*, 143. DOI: https://doi.org/10.1016/j.compbiomed.2022.105222
- Rahman, N., and Borah, B. (2021). An unsupervised method for word sense disambiguation. *Journal of King Saud University-Computer and Information Sciences*, 6. DOI: https://doi.org/10.1016/j.jksuci.2021.07.022.

- Roy, A., and Sarma, N. (2021). A synchronous duty-cycled reservation-based MAC protocol for underwater wireless sensor networks. *Digital Communications and Networks*, 7(3): 385-398.
- Roychoudhury, P., Roychoudhury, B., and Saikia, D. K. A secure Device-to-Device communication scheme for massive Machine Type Communication. *Computers & Security*, 108. DOI: https://doi.org/10.1016/j.cose.2021.102370.
- Roy, N., Kshattry, M., Mandal, S., Jolly, M.K., Bhattacharyya, D.K., and Barah, P. An integrative systems biology approach identifies molecular signatures associated with gallbladder cancer pathogenesis. *Journal of clinical medicine*, 10(16):3520.
- Sarmah, T., and Bhattacharyya, D.K. A study of tools for differential co-expression analysis for RNA-Seq data. *Informatics in Medicine Unlocked*, 26:100740.
- Sen, P., Aziz, R., Deka, R.C., Feil, E.J., Ray, S.K., and Satapathy, S.S. (2021). Stem region of tRNA genes favors transition substitution towards keto bases in bacteria. *Journal of Molecular Evolution*, 90(1):114-123.

Publication of Books

• Barah, P., Bhattacharyya, D. K., and Kalita, J. K. (2021). *Gene Expression Data Analysis: A Statistical and Machine Learning Perspective*. Chapman and Hall/CRC, New York, 1st edition. eBook ISBN: 9780429322655.

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- Basumatary, N., Nath, B., and Sarma, N. (2021). A Proposal for Predicting Missing Values in a Spectrum Dataset Using Supervised Learning. In Maji, A.K., Saha, G., Das, S., Basu, S., Tavares, J.M.R.S., editors, *Proceedings of the International Conference on Computing and Communication Systems. Lecture Notes in Networks and Systems*, volume 170, ISBN: 978-981-33-4083-1. Springer, Singapore.
- Chutia, D., Chouhan, A., Nishant, N., Singh, P. S., Bhattacharyya, D. K., and Raju, P. L. N. (2021). Image Processing Using Artificial Intelligence: Case Study on Classification of High-Dimensional Remotely Sensed Images. In Sharma, L., and Garg, P. K., editors, *Artificial Intelligence*, volume 1, pages 39-49, eBook ISBN: 978100314035. Chapman and Hall/CRC, New York.
- Deka, R. K., Bhattacharyya, D. K., and Kalita, J. K. (2021). Ddos attacks: Tools, mitigation approaches, and probable impact on private cloud environment. In Jan, T., and Chishti, S. M. A., editors, *Big Data Analytics for Internet of Things*. Volume 1, pages 285-319, ISBN: 9781119740759. John Wiley & Sons, Inc.
- Deka, R. K., Kalita, K.P., Bhattacharyya, D.K., and Boro, D. (2021). A Smart Feature Reduction Approach to Detect Botnet Attack in IoT. In: Bora, P.K., Nandi, S., Laskar, S. editors, *Emerging Technologies for Smart Cities. Lecture Notes in Electrical Engineering*, volume 765, pages 17-23, ISBN: 978-981-16-1549-8. Springer, Singapore.
- Hoque, N., Bhattacharyya, D.K., and Kalita, J.K. (2021). KNN-DK: A Modified K-NN Classifier with Dynamic k Nearest Neighbors. In Bansal, J.C., Fung, L.C.C., Simic, M., Ghosh, A., editors, *Advances in Applications of Data-Driven Computing. Advances in Intelligent Systems and Computing*, vol 1319, pages 21–34, ISBN: 978-981-33-6918-4. Springer, Singapore.
- Jitani, N., Singha, B., Barman, G., Talukdar, A., Choudhury, B. K., Sarmah, R. and Bhattacharyya, D. K. (2021). Gallbladder CT Image Segmentation by Integrating Rough Entropy Thresholding with Contours. In Gandhi, T.K., Konar, D., Sen, B. and Sharma, K., editors,

Advanced Computational Paradigms and Hybrid Intelligent Computing, volume 1373, pages 651-659, ISBN: 978-981-16-4368-2. Springer, Singapore.

- Ray, K., Saharia, S., and Sarma, N. (2021). A Study on Classification Accuracy of Different Features in Identification of Parasite Eggs from Microscopic Images of Fecal Samples. In Maji, A.K., Saha, G., Das, S., Basu, S., Tavares, J.M.R.S., editors, *Proceedings of the International Conference on Computing and Communication Systems. Lecture Notes in Networks and Systems*, 170, ISBN: 978-981-33-4083-1. Springer, Singapore.
- Sarmah, U., Bhattacharyya, D.K. (2022). Cost-Effective Detection of Cyber Physical System Attacks. In Dehuri, S., and Chen, Y. W., editors, *Advances in Machine Learning for Big Data Analysis. Intelligent Systems Reference Library*, volume 218, pages 33-69, ISBN:978-981-16-8929-1. Springer, Singapore.

Publication of Articles in Conference Proceedings

- Bardalai, P., Medhi, N., Bargayary, B., and Saikia, D. K. (2021). Open HealthQ: OpenFlow based QoS management of Healthcare Data in a Software-Defined Fog environment. In *IEEE International Conference on Communications* (ICC 2021), pages 1-6, Montreal, QC, Canada. IEEE.
- Bhowmick, A., Saharia, S., and Hazarika, S. M. (2021). Enhancing label transfer in nonparametric scene parsing by superpixel-based dense alignment. In *Proceedings of the Twelfth Indian Conference on Computer Vision, Graphics and Image Processing* (ICVGIP-2021), Pages 1-9, Jodhpur, India. Association for Computing Machinery, New York, United States.
- Borkakoty, H., and Sharma, U. (2021). A Naive Extractive Text Summarizer for Assamese Language. In *Third International Conference on Inventive Research in Computing Applications* (ICIRCA 2021), pages 1712-1717, Coimbatore, India. IEEE.
- Devi, M., Sarma, N., and Deka, S. K. (2021). Spectrum Auction Mechanism Based on Concurrent Bidding for Channel Allocation in Ad Hoc CRNs. In *IEEE 18th India Council International Conference* (INDICON-2021), pages 1-7, Guwahati, Assam, India. IEEE.
- Dutta, P. E., Neog, H., and Medhi, N. (2021). Health Monitoring in Internet of Medical Things (IoMT) using Machine Learning (ML) Approaches. In *IEEE Globecom Workshops* (GC Wkshps 2021), pages 1-6, Madrid, Spain. IEEE.
- Goswami, S., Singh, R., Saikia, N., Bora, K. K., and Sharma, U. (2021). TokenCheck: Towards Deep Learning Based Security Vulnerability Detection in ERC-20 Tokens. In *IEEE Region 10 Symposium* (TENSYMP 2021), pages 1-8, Jeju, Republic of Korea. IEEE.
- Saharia, D., Boruah, M. R., Pathak, N. K., and Sarma, N. (2021). An Ensemble based Modulation Recognition using Feature Extraction. In *International Conference on Intelligent Technologies* (CONIT-2021), pages 1-6, Hubli, India. IEEE.
- Sarkar, T., and Kalita, S. (2021). A Weighted Critic Update Approach to Multi Agent Twin Delayed Deep Deterministic Algorithm. In *IEEE 18th India Council International Conference* (INDICON 2021), pages 1-6, Guwahati, Assam, India. IEEE.
- Singh, P., Kumar, R., Kannaujia, S., and Sarma, N. (2021). Adaptive Replacement Cache Policy in Named Data Networking. In *International Conference on Intelligent Technologies* (CONIT-2021), pages 1-5, Hubli, India. IEEE.
- Singh, P., and Sarma, N. (2021). Adaptive Replacement Cache with Quality of Service for Delay Sensitive Applications in Named Data Networking. In *IEEE 18th India Council International Conference* (INDICON-2021), pages 1-6, Guwahati, Assam, India. IEEE.

| Name of | Purpose of | Title of Event | Date/Period | 0 |
|-------------------------|---------------------|------------------------------|-------------|----------------------------|
| Faculty/Staff Member | Attending | | | Venue (Online/ Offline) |
| Dr. S. S. | Organizing | National Workshop on Recent | 21-02-2022- | Dept. of CSE, |
| Satapathy | Committee | Trends in Computer | 25-02-2022 | Tezpur |
| | | Applications in Academia and | | University |
| | | Industry | | (Online) |
| Dr. S. K. Deka | Resource Person and | 1 | 21-02-2022- | Dept. of CSE, |
| | Organizing | Trends in Computer | 25-02-2022 | Tezpur |
| | Committee | Applications in Academia and | | University |
| | | Industry | | (Online) |
| Dr. Rosy | Resource Person | National Workshop on Recent | 21-02-2022- | Dept. of CSE, |
| Sarmah | | Trends in Computer | 25-02-2022 | Tezpur |
| | | Applications in Academia and | | University |
| | | Industry | | (Online) |
| Dr. Nabajyoti | Organizing | National Workshop on Recent | 21-02-2022- | Dept. of CSE, |
| Medhi | Committee | Trends in Computer | 25-02-2022 | Tezpur |
| | | Applications in Academia and | | University |
| | | Industry | | (Online) |
| Dr. Rosy | Resource Person | Online STTP On Recent | 25-10-2021- | Kaziranga |
| Sarmah | | Advancements in AI & Machine | 30-10-2022 | University, |
| | | Learning | | (Online) |
| Dr. | Organizing | National Workshop on Recent | 21-02-2022- | Dept. of CSE, |
| Shobhanjana | Committee | Trends in Computer | 25-02-2022 | Tezpur |
| Kalita | | Applications in Academia and | | University |
| | | Industry | | (Online) |
| Dr. | Organizing | National Workshop on Recent | 21-02-2022- | Dept. of CSE, |
| Swarnajyoti | Committee | Trends in Computer | 25-02-2022 | Tezpur |
| Patra | | Applications in Academia and | | University |
| | | Industry | | (Online) |
| Dr. Debojit | Organizing | National Workshop on Recent | 21-02-2022- | Dept. of CSE, |
| Boro | Committee | Trends in Computer | 25-02-2022 | Tezpur |
| | | Applications in Academia and | | University |
| | | Industry | | (Online) |
| | Resource Person | National Workshop on Recent | 21-02-2022- | Dept. of CSE, |
| Baishya | | Trends in Computer | 25-02-2022 | Tezpur |
| | | Applications in Academia and | | University |
| | | Industry | | (Online) |

Conference/Workshop/Symposium/Seminar etc. Attended

Invited Talk

| Name of Faculty Member | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|---------------------------|---------------------------------------|---|---------------------------|--|
| Dr. Rosy Sarmah | Machine Learning in Medical Images | Online STTP On Recent Advancements in AI & Machine Learning | 25-10-2021- 30-10-2021 | Kaziranga University, (Online) |
| Dr. Rosy Sarmah | Machine Learning in Healthcare | Recent Trends in Computer Applications in Academia and Industry | 21-02-2022- 25-02-2022 | Dept. of CSE, Tezpur University (Online) |

Awards/Honours/Notable Achievements

| Name of | Designation of | Achievement | Event/ Awarded by |
|----------------|----------------|--|-------------------|
| Awardee | Awardee | | |
| Prof. D. K. | | Included in the list of Top 2 percent Scientists | |
| Bhattacharyya | | in the Globe published by Stanford University | Professors in the |
| | | Professors in the PLOS Journal, August, 2021 | PLOS Journal |
| Dr. S. K. Deka | Faculty member | Senior Member IEEE (SMIEE)(93978071) | IEEE |
| Dr. S. K. Deka | Faculty member | Fellow of IETE (IETE/F-236527) | IETE |

Other Significant Activities of the Department (e.g., outreach/extension activities, events organized, etc.)

 National Workshop on Recent Trends in Computer Applications in Academia and Industry. Organized by Department of Computer Science & Engineering, Tezpur University. From 21st - 25th February 2022.

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme | |
|--------------------------------|------------------------------|--------------------|--|
| NET- JRF/LS | 03 | PhD | |
| NET- JRF/LS | 02 | M. Tech (IT/CSE) | |
| GATE | 24 | B. Tech (CSE) | |

Notable Placement of Students

| Name of Student | Academic | Placement Designation | Company/ | Mode of |
|--------------------------|--|---------------------------------|--------------|------------|
| | Programme | | Organization | Selection |
| Kaushik Kumar | B-Tech CSE | Software Development | Amazon India | Off-Campus |
| Bora | | Engineer | | _ |
| Subhasish | B-Tech CSE | Software Development | WazirX | Off-Campus |
| Goswami | | Engineer | | |
| Adittya Dey | B-Tech CSE | Software Engineer | Velocity | On-Campus |
| Nayanjeet Saikia | B-Tech CSE | Software Engineer | Velocity | On-Campus |
| Rabijit Singh | B-Tech CSE | Software Engineer | Velocity | On-Campus |
| Abhijit Sarmah | MCA | Associate Software Developer | IQVIA | On-Campus |
| Milan Mandal | B-Tech CSE | Associate Software Developer | IQVIA | On-Campus |
| Nishant Bora | B-Tech CSE | Associate Software Developer | IQVIA | On-Campus |
| Nistha Roy | Mtech | Associate Software Developer | IQVIA | On-Campus |
| Upam Sarmah | B-Tech CSE | Associate Software Developer | IQVIA | On-Campus |
| Sandeep Kumar Vishwas | Sandeep Kumar M-Tech Junior Management Grade | | Federal Bank | Off-Campus |
| Siddartha Das | M-Tech IT | Junior Management Grade I | Federal Bank | Off-Campus |
| Manab Kalyan Saha | MCA | Software Dev. | Allegion | On-Campus |
| Mohit Singh | MCA | Graduate Engineer Trainee | Allegion | On-Campus |
| Pradhan | | | | |
| Arindam Kashyap | MCA | Graduate Engineer Trainee | Allegion | On-Campus |
| Himanshu Gupta | B-Tech CSE | Graduate Engineer Trainee | Allegion | On-Campus |
| Kamalesh Sekhar | MCA | Global IT | Allegion | On-Campus |

| Bharadwaj | | | | |
|---------------------------------|--------------------------|---|-------------------------|------------|
| Barbie Duarah | B-Tech CSE | Graduate Engineer Trainee | Alstom | Off-Campus |
| Hirokjyoti Dutta | B-Tech CSE | Graduate Engineer Trainee | Alstom | Off-Campus |
| Bijoy Mogor | M-Tech CSE | Software Engineer | Betsol | Off-Campus |
| Binay Sharma | B-Tech CSE | Software Engineer | Betsol | Off-Campus |
| Ankit Kumar | B-Tech CSE | Senior Analyst | Capgemini | On-Campus |
| Mishra | D-Tech CSE | Semor Analyst | Capgemini | On-Campus |
| Deepjyoti | MCA (2 yr) | Analyst | Capgemini | On-Campus |
| Hazarika | WICK (2 yr) | Anaryst | Capgennin | On-Campus |
| Reco Das | MCA-3 Year | Analyst | Capgemini | On-Campus |
| Subham Dey | B-Tech CSE | Analyst | Capgemini | On-Campus |
| Sumit Ghosh | MCA (2 yr) | Analyst | Capgemini | On-Campus |
| Aasurjya Bikash | B-Tech CSE | Analyst Trainee | Cognizant Technologies | On-Campus |
| Handique | D Teen CDL | T maryst Trance | Cognizant reenhologies | On Campus |
| Debayan | MCA | Analyst Trainee | Cognizant Technologies | On-Campus |
| Chakravorty | WICH I | Thanyst Humee | cognizant reennologies | On Campus |
| Diptangshuman | MCA | Analyst Trainee | Cognizant Technologies | On-Campus |
| Das | | Thangst Trance | | on campus |
| Himanshu | MCA (2 yr) | Analyst Trainee | Cognizant Technologies | On-Campus |
| Chauhan | | Thangst Trance | | on campus |
| Hiranmoyee | MCA | Analyst Trainee | Cognizant Technologies | On-Campus |
| Dehingia | | | | on campus |
| Ishika Sharma | MCA (2 yr) | Analyst Trainee | Cognizant Technologies | On-Campus |
| Kasturi Bora | MCA-2 | Analyst Trainee | Cognizant Technologies | On-Campus |
| | Year | | | on campus |
| Meghna Roy | B-Tech CSE | Analyst Trainee | Cognizant Technologies | On-Campus |
| Neha Kumari | MCA (2 yr) | Analyst Trainee | Cognizant Technologies | On-Campus |
| Ojosmita | MCA (2 yr) | Analyst Trainee | Cognizant Technologies | On-Campus |
| Bachistha | - () / | | | · · · · |
| Goswami | | | | |
| Prince Singh | MCA (2 yr) | Analyst Trainee | Cognizant Technologies | On-Campus |
| Rituraj Harsh | MCA (2 yr) | Analyst Trainee | Cognizant Technologies | On-Campus |
| Sajjadul Islam | M-Tech IT | Analyst Trainee | Cognizant Technologies | On-Campus |
| Samrat Roy | MCA-2 | Analyst Trainee | Cognizant Technologies | On-Campus |
| • | Year | - | | |
| Sanjeev Prasad | MCA (2 yr) | Analyst Trainee | Cognizant Technologies | On-Campus |
| Satyajit Das | MCA | Analyst Trainee | Cognizant Technologies | On-Campus |
| Saurabh Kumar | B-Tech CSE | Analyst Trainee | Cognizant Technologies | On-Campus |
| Singh | | - | | - |
| Siripurapu Pavan | B-Tech CSE | Analyst Trainee | Cognizant Technologies | On-Campus |
| Kumar | | | | - |
| Aditya Nath | B-Tech CSE | Associte IT Consultant | ITC Infotech | On-Campus |
| Ankit Agarwal | B-Tech CSE | Associte IT Consultant | ITC Infotech | On-Campus |
| Anupam Chetia | B-Tech CSE | Associte IT Consultant | ITC Infotech | On-Campus |
| Avishek Dutta | B-Tech CSE | Associte IT Consultant | ITC Infotech | On-Campus |
| Gautam Baishya | B-Tech CSE | Associte IT Consultant | ITC Infotech | On-Campus |
| Krishna Prabhakar | B-Tech CSE | Associte IT Consultant | ITC Infotech | On-Campus |
| Masud Ahmed | B-Tech CSE | Associte IT Consultant | ITC Infotech | On-Campus |
| | | | | <u> </u> |
| Utkarsh Anand | B-Tech CSE | Associte IT Consultant | ITC Infotech | On-Campus |
| Utkarsh Anand Abhishek Kumar | B-Tech CSE M-Tech CSE | Associte IT Consultant Software Engineer | L&T Technology Services | Off-Campus |
| | | | | ^ |

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| Indrani Kashyap | M-Tech CSE | Software Engineer | L&T Technology Services | Off-Campus |
|-------------------|------------|----------------------------|-------------------------|-------------|
| Jublee Gogoi | M-Tech IT | Software Engineer | L&T Technology Services | Off-Campus |
| Rasel Ahmed | M-Tech IT | Software Engineer | L&T Technology Services | Off-Campus |
| Suman Kumar | M-Tech IT | ~ | | · · · · · |
| | M-Tech II | Software Engineer | L&T Technology Services | Off-Campus |
| Chaudhury | M Tash IT | Coffeenant Englisher | L OT Taskaslass Comisso | Off Commune |
| Wajid Rahman | M-Tech IT | Software Engineer | L&T Technology Services | Off-Campus |
| Manab Boro | MCA | Associate Software | Paralaxion | Off-Campus |
| | | Engineer | | |
| Harshita Yadav | MCA (2 yr) | Assistant System Engineer- | TCS | On-Campus |
| | | Trainee | | |
| Koushik Kumar | MCA (2 yr) | Assistant System Engineer- | TCS | On-Campus |
| Borah | | Trainee | | |
| Latashree Gogoi | MCA | Assistant System Engineer- | TCS | On-Campus |
| | | Trainee | | |
| Mintu Moni Kurmi | MCA (2 yr) | Assistant System Engineer- | TCS | On-Campus |
| | _ | Trainee | | _ |
| Nikita Agarwal | MCA | Assistant System Engineer- | TCS | On-Campus |
| | | Trainee | | - |
| Sumit Baruah | MCA (2 yr) | Assistant System Engineer- | TCS | On-Campus |
| | | Trainee | | 1 I |
| Abdul Munyeem | B-Tech CSE | Project Engineer | Wipro | On-Campus |
| Siddique | | 5 6 | 1 | 1 |
| Ankush Kumar | B-Tech CSE | Project Engineer | Wipro | On-Campus |
| Dipankar Chetry | B-Tech CSE | Project Engineer | Wipro | On-Campus |
| Nitish Kumar | B-Tech CSE | Project Engineer | Wipro | On-Campus |
| Owashim Akram | B-Tech CSE | Project Engineer | Wipro | On-Campus |
| Suraj Sarmah | B-Tech CSE | Project Engineer | Wipro | On-Campus |
| Agrajit Neog | MCA (2 yr) | Associte Software Engineer | Zaloni Technologies | On-Campus |
| Moloy Writ Saikia | B-Tech CSE | Associte Software Engineer | Zaloni Technologies | On-Campus |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic | Name of other Institute | Enrolled |
|--------------------------|--------------------------|-----------------------------------|------------------|
| | Programme (in TU) | | Academic |
| | | | Programme |
| Riya Saha | M. Tech in IT | Queens University Belfast | PhD |
| Debabrata Khargharia | M. Tech in IT | NIT, Silchar | PhD |
| Rishang Kumar Brahma | M. Tech in CSE | Tezpur University | PhD |
| Dipti Deb | M. Tech in CSE | Tezpur University | PhD |
| Abhijit Gogoi | M. Tech in IT | Tezpur University | PhD |
| Dilwar Hussain Barbhuiya | M. Tech in IT | Tezpur University | PhD |
| Subham Pandey | M. Tech in IT | IIT BHU | PhD |
| Punam Sarmah | M. Tech in IT | Tezpur University | PhD |
| Narendra Yadav | MCA | IIT Jodhpur | M. Tech |
| Sandeep Kumar Prajapati | MCA | Tezpur University | MBA |
| Swarnabh Kashyap | B. Tech in CSE | Rochester Institute of Technology | MS, Data Science |
| Shivam Ayengia | B. Tech in CSE | Delhi School of Economics | MBA |
| Ankit Kumar | B. Tech in CSE | NIT, Surathkal | M. Tech |
| Astha Borkataky | B. Tech in CSE | IIIT Banglore | M. Tech |
| Dikshita Medhi | B. Tech in CSE | Chirst University, Banglore | MBA |
| Tiasha Bhowmik | B. Tech in CSE | BITS, Pilani | M. Tech |
| Sagar Biswas | B. Tech in CSE | IIT Bombay | M. Tech |
| Shibani Das | B. Tech in CSE | IIT Indore | M. Tech |

| Ramyanee Kashyap | B. Tech in CSE | IIIT Delhi | M. Tech |
|-------------------|----------------|----------------------------------|---------|
| Madhuryya Kashyap | B. Tech in CSE | Tezpur University | M. Tech |
| Sandeep Dev Misra | B. Tech in CSE | IIIT, Hyderabad | M. Tech |
| Aditya Goswami | B. Tech in CSE | FORE School Of Management, | MBA |
| | | New Delhi | |
| Gaurav Kumar | B. Tech in CSE | IIT Guwahati | M. Tech |
| Masood Rahman | B. Tech in CSE | Symbiosis Centre for Information | MBA |
| | | Technology | |

DEPARTMENT OF DESIGN

About the Department

Tezpur University is starting a new department, "Department of Design" under the School of Engineering considering the importance of design in the success of any product. India represents a huge market, and an "Atmanirbhar Bharat" needs an enormous range of well-designed products for its own population as well as the rest of the world. That needs training and preparing future generations of technocrats with the right design perspective.

Initially, the department will offer elective courses to the B. Tech. and M. Tech. programmes with the objective of providing the students, of the engineering disciplines in particular, with the perspectives of design, thinking and the necessary training. Soon these will be extended to students of other programmes. That will be followed by starting of UG/ PG programmes on design in phases. We also envisage the need for catering to students/ project-specific requirements which will add a new perspective to design and innovation of various engineering product design and development initiatives by adding a human-centric focus.

Academic Programmes and Student Intake

| Academic Programme | Student Intake | |
|----------------------------|----------------|--|
| Master of Design (M. Des.) | 18 | |

Thrust Research Areas of the Department

- Technology-based Design
- Life-centered Design
- Inclusive Design
- Integrated Design
- Community-based Design
- Sustainable Design

Major Facilities/Equipment available

- **Digital Prototyping Studio:** The studio have the following equipment
 - 10 numbers of High End Computers (HP Z2 G4 Intel Core i7-9700/ 16GB/ 1TB)
 - 02 numbers of Workstation (Dell Precision 3640)
 - Software Packages (Solidworks, Rhino, Adobe master suit)
 - Cintiq Pro for product styling, illustrations, and visual design
 - 01 Wacom Cintiq Pro 32 inch
 - 02 Wacom Cintiq Pro 24 inch
- **Physical Prototyping Studio:** The studio have the following equipment
 - 3D Clay and Plastic Printer
 - 3D Printer with Nylon, PLA, ABS, CPE and PVA Printing
- Communication Studio: The studio have the following equipment
 - DSLR Camera
 - Tripods

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------------|------------------------------------|---|-------------------------------------|------------------------------------|---|
| Associate Professor | Nayan Moni Kakoty, HoD (i/c) | Ph. D. (Tezpur University) | Rehabilitation Robotics | nkakoty | 01-07-2019 |
| Anning | Shiv Kumar Verma | Ph. D. (IIT Guwahati) | Industrial Design | shiv | 10-06-2020 |
| Assistant Professor | Srinivasan G | Ph. D. (IIITDM Kancheepuram) | Product Design, Thermal Sciences | srini | 19-01-2022 |
| Guest | Pranjal Protim Borah | M. Tech. (CSE-AI, Assam Don Bosco University) | Interaction Design | ppborah | 20-09-2021 |
| Guest Faculty | Kankana Narayan Dev | M. Arch. (Urban Design and Development,MAHE) | Visual Communication Design | kankana.dev | 24-09-2021 |

Officers and Staff Members

| Designation | Name | | Date of holding the current position |
|----------------------|---------------------|-----------------------------|--------------------------------------|
| Laboratory Assistant | Mr. Himanshu Nath | himansu | 18-01-2021 |
| MTS | Mr. Gitartha Bhatta | gitarthabhatta123@gmail.com | 17-12-2021 |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Verma S.K., Punekar R.M. (2021). Decoding Nature-Inspired Form Generation Processes. In: Chakrabarti A., Poovaiah R., Bokil P., Kant V. (eds) Design for Tomorrow—Volume 3. Smart Innovation, Systems and Technologies, vol 223. Springer, Singapore.
- Verma S.K., Punekar R.M. (2020). Design Science Approach to Nature Inspired Product Forms: Studies on Processes and Products. Synergy: Design Research Society (DRS) 2020.
- Verma S.K., Punekar R.M. (2019). Observing Nature—What Designers Can Learn from Biologists. In: Chakrabarti A. (eds) Research into Design for a Connected World. Smart Innovation, Systems and Technologies, vol 135. Springer, Singapore
- Verma S.K., Punekar R.M. (2017). Nature Inspired Design—A Review from an Industrial Design Perspective. In: Chakrabarti A., Chakrabarti D. (eds) Research into Design for Communities, Volume 2. ICoRD 2017. Smart Innovation, Systems and Technologies, vol 66. Springer, Singapore.

DEPARTMENT OF ELECTRICAL ENGINEERING

About the Department

The Electrical Engineering department started in 2014 under the School of Engineering with the B.Tech program. The aim of the department is to impart quality education, training, and research at the undergraduate level in forefront areas of Electrical Engineering and its allied technologies. The Department currently offers BTech and PhD programs in Electrical Engineering. These programs aim to produce engineers with sound basic and applied electrical engineering knowledge.

The Department plans to expand its teaching and research infrastructure, enhance its industrial and research collaboration, and implement modern techniques for training to realize the above-mentioned goals.

The key areas of faculty expertise of in the department include Power System Engineering, Power Electronics, Nonlinear Analysis-Theory, Methods & Applications, Control Systems, Fractional Order Chaotic Systems, Converter and Inverter Topologies, Sensor Technologies, Smart Grid Technologies and Policy Design, Distributed Generation Based System Optimization, Renewable Energy Management, Bio-electronics, and Neuro Engineering.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|--------------------|-----------------------------------|
| B.Tech | 41 |
| Ph.D. | Variable (admitted 02 in 2021-22) |

Thrust Research Areas of the Department/Centre

- Smart Energy and Control Systems
- Power Electronics and Microgrid/Smartgrid
- Sensors & Sensing Technologies for Green Energy, Food and Health

Major Facilities/Equipment available

- Low Resistance Measurement Kelvin Double Bridge Kit
- Power System & Protection Lab
- Magnetic Levitation System for Control System Design.
- PCB Prototyping Machine.
- Typhoon-Hardware in loop (HIL) 402 Real Time Emulator
- Magnetic levitation system
- Hot Air Oven
- Muffle Furnace with Profile controller upto 1200 °C
- Hot Plate with Magnetic Stirrer
- Conductivity Meter

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | | Date of holding the current position |
|-------------|------------|---|---------------------|------|---|
| Associate | Asim Datta | Ph.D | Energy Engineering, | asim | 01-12-2021 |

| Professor | | (IIEST, | Renewable Energy | | |
|----------------|--------------|-------------------------|-----------------------------|---------|------------|
| | | Shibpur) | Sources. | | |
| | Md Rahat | Ph.D | Instrumentation and | rahat | 30-09-2020 |
| | Mahboob | (Jamia Millia | Control Sensors and Signal | | |
| | | Islamia, New | Conditioning Wireless | | |
| | | Delhi) | measurement Health | | |
| | | | Monitoring & IoT, Food | | |
| | | | Quality, Smart Agriculture | | |
| | | | | | |
| | N 11 | | Green Technology | 1 | 02 10 2020 |
| | Manashita | Ph.D | Smart Energy systems | manabor | 03-10-2020 |
| | Borah | (NIT Silchar, | Control Systems IoT | | |
| | | Assam) | Chaos and Fractional-order | | |
| | | | Systems waste water | | |
| | | | management | | |
| | Barnam Jyoti | M.Tech | Power Electronic | bjsece | 19-11-2019 |
| | Saharia | (NIT | converters for Renewable | | |
| | | Agartala, | Energy Applications | | |
| | | Tripura) | Hybrid PV-Wind Energy | | |
| | | 111 p = 1 = 1) | System Modeling and | | |
| | | | Optimization Fuzzy and | | |
| | | | Neural Network | | |
| | | | | | |
| , • , , | | | applications in power point | | |
| Assistant | | | tracking of PV systems | | |
| Professor | | | Optimization in power | | |
| | | | electronic converters | | |
| | | | design Artificial | | |
| | | | Intelligence in Renewable | | |
| | | | Energy applications | | |
| | Anish Ahmad | Ph.D. | Power Electronics and | aahmad | 20-01-2020 |
| | | (IIT, BHU | Drives Modeling and | | |
| | | Varanasi) | Control of Power | | |
| | | (urunusi) | Electronics and Drives | | |
| | | | systems Renewable Energy | | |
| | | | Integration Microgrid/ | | |
| | | | 0 | | |
| | | | Smartgrid Electric | | |
| | | | Vehicle/Hybrid Electric | | |
| | | | Vehicle | | |
| | Soumya | Ph.D. | Power and Energy Systems | soumya | 06-12-2021 |
| | Samanta | (NIT, Silchar, | Engineering | | |
| | | Assam) | Renewable Energy | | |
| | | | Integration and Microgrid | | |
| | | | Control Power/ Energy | | |
| | | | Management in Microgrid | | |
| | | | Electric Vehicle and Drives | | |
| | Rumi | Ph. | Load frequency control, | rumi90 | 20-08-2018 |
| | Rajbongshi | (NIT, Silchar, | | | 20 00 2010 |
| | Rajuongsin | (NIT, Shehar, Assam) | system operation and | | |
| | | Assail) | • • | | |
| Guest | | | control, deregulated power | | |
| Faculty | | | system, solar | | |
| | | | photovoltaic, techno | | |
| | | | economic assessment of | | |
| | | | hybrid system for rural | | |
| | | | electrification. | | |

| Debnath | n Ph.D | Control Systems, Circuit | devnath.nitap | 09-02-2021 |
|---------|-------------|--------------------------|-----------------|------------|
| Shah | (NERIST, | Theory, Digital | @gmail.com | То |
| | Arunachal | Electronics, Power | | 15-03-2022 |
| | Pradesh) | Electronics, Electricity | | |
| | | Market, Signals & | | |
| | | Systems, Engineering | | |
| | | Mathematics, Power | | |
| | | Systems | | |
| Sorokha | uibam Ph.D | Power System Engineering | soronilameitei@ | 11-10-2021 |
| Nilakan | ta (NERIST) | | gmail.com | То |
| Meitei | | | | 13-04-2022 |

Officers and Staff Members

| Designation | Name | @tezu.ernet.in | Date of holding the current position |
|----------------------|-----------------------|-----------------------------|--|
| Laboratory Assistant | Mr Biswajeet Nath | biswa89 | 22-10-2019 |
| Technical Assistant | Mr Debabrat Borkotoky | debabratborkotoky@gmail.com | 01-11-2021 |
| Technical Assistant | Mr. Madhujya Dowarah | madhujyaduwarah@gmail.com | 02-06-2022 |
| Office Assistant | Mr Mrinal Basumatary | mrin123 | 29-10-2021 |
| | Mr Zakir hussain | Zakir07 | 21-10-2019 |

Research Projects (both Ongoing and New)

| Project Title | Funding | Amount | Duration | Investigator(s) |
|--|---------|----------|----------|-----------------|
| | Agency | (in INR) | | |
| High Voltage Gain Converters for Renewable | UGC-BSR | 1000000 | 2 Years | Dr. Anish |
| Energy Resource Applications | | | | Ahmad |
| Development of An on-Board Hybrid charging | CPRI | 3146000 | 2 Years | Dr. Asim Datta |
| system For Hilly-stationperformance Light | | | | |
| Electric Vehicle" | | | | |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Borah, M., Gayan, A., Sharma, J.S., Chen, Y., Wei, Z. and Pham, V. T. (2022). Is fractional-order chaos theory the new tool to model chaotic pandemics as Covid-19?.*Nonlinear Dynamics*, 1-29. DOI: https://link.springer.com/article/10.1007/s11071-021-07196-3.
- Saha, C., Verma, V., Tarodiya, R., Mahboob, Md R. and Kumar, R. (2021). Analytical modeling of a radiant cooling system for thermal performance analysis. *Materials Today: Proceedings*, 47, 2474-2480.
- Siddiqui, M. A., Anwar, M. N., Laskar, S. H. and Mahboob, Md R. (2021). A unified approach to design controller in cascade control structure for unstable, integrating and stable processes. *ISA transactions*, 114, 331-346.
- Borah, M., Das, D., Gayan, A., Fenton, F and Cherry, E. (2021). Control and anticontrol of chaos in fractional-order models of Diabetes, HIV, Dengue, Migraine, Parkinson's and Ebola virus diseases. Chaos, Solitons & Fractals, 153, 111419.
- Borah, M., Roy, B. K., Kapitaniak, T., Rajagopal, K. and Volos, C. (2021). A revisit to the past plague epidemic (India) versus the present COVID-19 pandemic: fractional-order chaotic models and fuzzy logic control. *The European Physical Journal Special Topics*, 1-15. DOI: https://link.springer.com/article/10.1140/epjs/s11734-021-00335-2.

- Borah, M. and Roy, B. K. (2021). Hidden multistability in four fractional-ordermemristive, meminductive and memcapacitive chaotic systems with bursting and boosting phenomena. *The European Physical Journal Special Topics*, 230(7), 1773-1783.
- Sarker, R., Datta, A. and Debnath, S. (2021). An improved multicarrier PWM (MCPWM) technique with a new harmonic mitigation strategy for cascaded H-bridge multilevel inverter applications. *IEEE Transactions on Industrial Informatics*, 18(3), 1500-1510.

Publication of Book Chapters

- Mahboob, Md R., Khan, S. A. and Islam, T. (2021). Humidity detection in low ppm using printable flexible sensors. Printed and Flexible Sensor Technology. In S. C. Mukhopadhyay, A. Nag editor(s), Printed and Flexible Sensor Technology, Fabrication and applications, 17, pages 1-18, IOP Science UK.
- Ahmad, A. and Singh, R. K. (2021). Converter classification, analysis, and control issues with EV. In Singh, R., Padmanaban, S., Dwivedi, S., Molinas, M., Blaabjerg, F., editors, *Cable Based and Wireless Charging Systems for Electric Vehicles: Technology and control, management and grid integration, Transport*, pages 135-161, IET UK.

| Name of | Title of the | Title of the Event | Date | Organizer and Venue |
|-----------|--------------|---------------------|----------------|-------------------------------------|
| Faculty | Talk | | | |
| Member | | | | |
| Dr | Human | Azadi ka Amrit | 22-10-2021 | Department of Science and |
| Manashita | Capacity | Mahotsav: Vigyan | | Technology, Assam Science |
| Borah | building | Utsav | | Technology & Environment Council |
| Dr | IoT in smart | National Seminar on | 12, 14-05-2022 | Department of Science and |
| Manashita | energy and | IoT and IoT based | | Technology, Arunachal Pradesh State |
| Borah | E-health | Applications | | Council for Science and Technology, |
| | | | | Itanagar |

Invited Talk

Other Significant Activities of the Department/Centre (e.g., outreach/extension activities, events organized, etc.)

- Trilingual glossary of engineering in Assamese language (Dr Manashita Borah, MrBarnam J Saharia)
- Industrial tour to PowerGridBNC (Dr Manashita Borah, Dr Soumya Samanta)

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|--------------------|
| GATE | 03 | B.Tech in EE |

Notable Placement of Students

| Name of Student | Academic | Placement | Company/ Organization | Mode of |
|-----------------------|-----------|------------------|--------------------------------|-----------|
| | Programme | Designation | | Selection |
| Ashutosh Tiwari | B. Tech | Trainee Engineer | Innovaccer Analytics Pvt. Ltd. | On Campus |
| Abhilash Kumar Halwai | B. Tech | Trainee Engineer | Congnizant Technologies | On Campus |
| ParthaPratim Bora | B. Tech | Trainee Engineer | Congnizant Technologies | On Campus |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic Programme | Name of other Institute | Enrolled Academic |
|---------------------|--------------------|-------------------------|-------------------------|
| | (in TU) | | Programme |
| AntarikshaRajkumari | B. Tech | ESMT Berlin | MBA(Masters of Business |
| | | | Administration) |
| Debanita Das | B. Tech | IIT, Bombay | Ph.D. |

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

About the Department

Established in 1997, the Department of Electronics and Communication Engineering is one of the oldest departments in the University with the Department started with an M.Tech. Programme in Electronics Design and Technology in 1997, and subsequently introduced another M.Tech. Programme in Bioelectronics under the "Teaching and Research in Interdisciplinary and Emerging Areas" scheme of the University Grants Commission. The Department expanded its academic activities to undergraduate programmes, first with a B.Tech. Programme in Electronics and Communication Engineering in 2006, followed by another B.Tech. Programme in Electrical Engineering in 2014 (currently under the department of Electrical Engineering since October 2016). The Department also implemented a threeyear diploma programme in Advanced Diploma in Healthcare Informatics and Management under the career-oriented scheme of the University Grants Commission (2012-2017). In addition, the department offers Ph.D. programmes in different areas, including Signal and Image Processing, Vehicular Electronics, Bioelectronics, Biosensors, Microwave Engineering, Neuro-bio engineering, and Communication Engineering and Microelectronics. The Department is supported by DST-FIST, DeitY -MIT, UGC-SAP (DRS-I), AICTE, RPS, AICTE NEQIP, and Visvesvaraya Ph.D. Scheme under Meity, GoI. Faculties of the department have several international research collaborations, including Queen's University Belfast (QUB), UK; University Technology Malaysia, Malaysia; Airlangga University, Indonesia, and University of Rio de Janeiro, Brazil.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|--|-----------------------------------|
| M.Tech. in Electronics Design and Technology | 35 |
| M.Tech. in Bioelectronics | 19 |
| B.Tech. in Electronics and Communication Engineering | 68 |
| Ph.D. in Electronics and Communication Engineering | Variable (admitted 09 in 2021-22) |

Thrust Research Areas of the Department

- Microwave, Communication Engineering, Semiconductor Devices.
- Biosensors, Bioelectronics, Neuroengineering intelligent Instrumentation, Image and Signal Processing.
- Vehicular Electronics, Power Electronics, Robotics

Major Facilities/Equipment available

Experimental:

- Optical Lithography unit (Suss Microtech)
- Thin film deposition unit
- Mili-Q water system
- Probe Station
- Reactive Ion etching unit (Hind Hivac)
- Plasma Enhanced CVD (Hind Hivac)
- Vacuum coating unit (E-Beam and thermal)
- Physical vapor deposition unit
- Spin coater (Suss Microtech)

- Spectrum analyzer
- Optical Microscope
- Thin film thickness measurement unit (F20 Sinsil International)
- Multichannel Bio-signal acquisition unit
- Quantum Efficiency and IV measurement set up (Under procurement process)
- FPGA board
- Potentiostat-Galvanostat
- Probe Sonicator
- Centrifuge machine

Computational:

- Cadence UG/PG bundle
- Synopsys TCAD
- Mentor Graphics
- Xilinx

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|-------------|---------------------------|---|---|------------------------------------|---|
| | Partha Pratim Sahu | PhD (Jadavpur University) | Optical Network, Clinical Instrumentation, Micro- fabrication, Quantum Technology | pps | 30-11-2008 |
| | Jiten Ch. Dutta | PhD (Jadavpur University) | Biosensors and Bioelectronics, Neurobioengineering | jitend | 01-01-2009 |
| | Satyajib Bhattacharyya | PhD (University of Delhi) | Microwave Antennas, Absorbers and Materials | sb | 18-11-2011 |
| Professor | Santanu Sharma | PhD (Tezpur University) | Semiconductor Devices, Bioelectronic Devices, Vehicular Electronics, Power Electronics | SSS | 22-01-2014 |
| | Soumik Roy | PhD (Tezpur University) | Neuroengineering, Healthcare system, Hydroponics, Digital System Design, Intelligent Instrumentation | xoumik | 05-01-2015 |
| | Bhabesh Deka | PhD (IIT Guwahati) | Image Processing, Computer Vision, and Biomedical Signal/Image Analysis using Machine/Deep Learning | bdeka | 05-01-2015 |

| | Vijay Kumar | PhD (IIT | Image Processing, | vknath | 01-09-2015 |
|------------------|--------------------------|-------------------------------|---|-----------|------------|
| l | Nath | Guwahati) | Machine Learning, Computer Vision, | | |
| | | | Pattern recognition, Deep Learning | | |
| | Nayan Moni Kakoty | Ph.D. (Tezpur University) | Robotics, Biomedical Signal Processing | nkakoty | 18-02-2018 |
| Associate | Deepika Hazarika | Ph.D (Tezpur University) | Image and Video Processing | deepika | 17-02-2015 |
| Professor | Ratul Kumar Baruah | Ph.D. (IIT Guwahati) | Nanoelectronics, Biosensors, Flexible Electronics | ratulkr | 17-02-2020 |
| | Riku Chutia | Ph.D. (Tezpur University) | E-nose, Instrumentation and Signal Processing, Embedded System | riku | 20-02-2016 |
| | Biplob Mondal | Ph.D (Jadavpur University) | VLSI and MEMS Devices | biplobm | 18-02-2019 |
| Assistant | Durlav Sonowal | Ph.D. (Tezpur University) | Sensors, Signal Processing | dsn | 14-10-2009 |
| Professor | Ananya Bonjyotsna | Ph.D. (Tezpur University) | Audio Processing | ananyab | 01-09-2012 |
| | Priyanka Kakoty | Ph.D (Tezpur University) | Sensor and Nanotechnology | priyankak | 14-09-2017 |
| | Rupam Goswami | Ph.D (NIT SIlchar) | Micro/Nano-electronics and VLSI, Bio/ Memristive Sensors, Charcoal Electronics | rupam21 | 26-02-2020 |
| Guest Faculty | Hiranya Ranjan Thakur | Ph.D. (Tezpur University) | Bioelectronics | hiranya2 | 06/10/2021 |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the |
|----------------------|---------------------|-------------------------------|---------------------|
| | | | current position |
| Technical Officer | Anukul Baishya | anukul | 01-04-1997 |
| Technical Assistant | Kulendra Sharma | kulen | 10-01-2007 |
| | Jiten C. Boro | j_boro | 20-08-2007 |
| | Khagen Gogoi | khageng | 27-07-2018 |
| Technician | Satya Prasad Saikia | satyap | 10-01-2007 |
| Laboratory Assistant | Rupak Sharma | rupak | 22-09-2010 |
| | Navanit Kumar Roy | navanit | 09-10-2015 |
| Machine Operator | Bipul Das | bipulda | 06-03-2017 |
| Assistant | Naba Jyoti Deka | naba | 02-01-2018 |
| MTS | Dharani Dhar Bania | baniad2 | 01-03-1998 |

Major Research and Development Findings

| Faculty/ Researcher | Salient Research Findings |
|---------------------|---|
| Nayan M. Kakoty, | Design Registration: |
| Sharmistha Das and | Prosthetic Hand, Class: 24-00-Medical and Laboratory Equipment. Application |
| Lakhyajit Gohain | No. 336557-001, Journal No. 49/2021, December 03, 2021. |

Research Projects (both Ongoing and New)

| Project Title | Funding Agency | Amount (in INR) | Duration | Investigator(s) |
|---|---|--------------------|----------|--------------------------|
| Sensor array on flexible substrate for monitoring BTEX VOCs and hydrocarbons particularly present in oil and natural gas industrial environment | Science and Engineering Research Board, DST, Govt. of India | 23.82 Lakh | 3 yrs | Dr. Biplob Mondal |
| Fabrication characterization and modeling of CNT based high dielectric enzymatic field effect crearinine biosensor. | AICTE | 25 Lakhs | 3 yrs | Prof. J C Dutta |
| Design and implementation of low cost hybrid aquaponic system | AICTE | 21.86 Lakhs | 3 yrs | Prof. Soumik Roy |
| Development of A Cost-Effective EMG Controlled Prosthetic Hand for Multiple Patterns | I-Hub Foundation for COBOTICS, Technology Innovation Hub of IIT Delhi set up by DST, Govt. of India | 43.44 Lakhs | | Prof. Nayan M. Kakoty |
| A behavioral model of Ion Sensitive Field Effect Transistor (ISFET) with spatial dependence on reference electrode and development of a hardware system for model validation. | ASTEC | 4.7 Lakhs | 2 yrs | Prof. Santanu Sharma |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Das, S. and Sahu, P. P. A novel electrochemical interdigitated electrodes sensor for limonin quantification and reduction in citrus limetta juice. *Food Chemistry*, 381:132248, 2022.
- Chetia, R., and Sahu, P. P. Quantum Edge Extraction of Chest CT Image for the Detection and Differentiation of Infected Region of COVID-19 Patient. *Arabian journal for science and engineering*, 1-12, 2022.
- Deka, B., and Dandabat, S. A Deep framework for enhancement of diagnostic information in CSMRI reconstruction. *Biomedical Signal Processing and Control*, 71:103117, 2022.
- Deka, D., and Deka, B. Characterization of heart rate variability signal for distinction of meditative and pre-meditative states. *Biomedical Signal Processing and Control*, 66:102414, 2021.
- Deka, D., and Deka, B. Stratification of High-Risk Hypertensive Patients Using Hybrid Heart Rate Variability Features and Boosting Algorithms. *IEEE Access*, 9:62665-62675, 2021. DOI: 10.1109/ACCESS.2021.3074967.
- Desai, M. S., and Goswami, R. A Multiple-Trapping-and-Release Transport Based Threshold Voltage Model for Oxide Thin Film Transistors. *Journal of Electronic Materials*, 50:4050-4057, 2021.
- Goswami, D., and Baruah, R. Role of gate electrode in influencing interface trap sensitivity in SOI tunnel FETs. *Journal of Micromechanics and Microengineering*, 32:044006, 2022.
- Gupta, K. A., Sahu, P. P., and Mishra, P. Ultrasound aided debittering of bitter variety of citrus fruit juice: Effect on chemical, volatile profile and antioxidative potential. *Ultrasonics Sonochemistry*. 81:105839, 2021.

- Kakoty, N. M., and Gohain, L. An EMG based prosthetic hand controller for real time grasping realizing neuromuscular constraint. *International Journal of Intelligent Robotics and Applications*, 1-13, 2021.
- Keshwani, G., and Dutta, J. C. CNT based high-κ dielectric Ion Sensitive Field Effect Transistor Based Cholesterol Biosensor. *Current Trends in Biotechnology and Pharmacy*, 15(2):182-188, 2021.
- Keshwani, G., and Dutta, J. C. High Performance CNTENFET with K/PPy/CNT nanocomposite biosensing layer for Cholesterol Detection. *TechRxiv*, 2021.
- Mondal, B., and Gogoi, P. K. Nanoscale Heterostructured Materials Based on Metal Oxides for a Chemiresistive Gas Sensor. *ACS Applied Electronic Materials*, 59-86, 2022.
- Panicker, N. J., and Sahu, P. P. Green reduction of graphene oxide using phytochemicals extracted from Pomelo Grandis and Tamarindus indica and its supercapacitor applications. *Journal of Materials Science: Materials in Electronics*, 32(11):15265-15278, 2021.
- Panicker, N. J., and Sahu, P. P., 2021. Green reduction of graphene oxide using phytochemicals extracted from Pomelo Grandis and Tamarindus indica and its supercapacitor applications. *Journal of Materials Science: Materials in Electronics*, 32(11):15265-15278, 2021.
- Saha, R., and Goswami, R. Performance Evaluation of Epitaxial Layer Based Gate Modulated TFET (GM-TFET). *Silicon*, 1-6, 2021.
- Sahu. P. Optical switch based on Graphene clad two surface plasmonic polariton mode coupler. *Optik*. 227:166026, 2021.
- Sahu. P. Quantum Optic Entanglement Using Graphene Clad Surface Plasmonic Polariton Device, 2021.
- Sharma, R., Hussung, R., and Deka, B. Coded-Aperture Computational Millimeter-Wave Image Classifier Using Convolutional Neural Network. *IEEE Access*, 9:119830-119844, 2021.
- Sharma, S., and Das, K. Coulombic efficiency estimation technique for eco-routing in electric vehicles. *AIMS Energy*, 10(3):356–374, 2022.
- Sodhani, A., and Goswami. R. Design of Pixel Circuit Using a-IGZO TFTs to Enhance Uniformity of AMOLED Displays by Threshold Voltage Compensation. *Arabian Journal for Science and EngineerinG*, 46:9663-9672, 2021.
- Tanveer, M., Sahu, P. P., and Deka, P. Advances of machine learning in data analytics and visual information processing. *Springer Link*, 2021.
- Toan, H. L. M., and Goswami, R. Impact of gate dielectric on overall electrical performance of Quadruple gate FinFET. *Applied Physics A*, 128(2):1-12, 2022.
- Baruah, H. G., Nath, V. K., Hazarika, D., and Hatibaruah, R. Local bit-plane neighbour dissimilarity pattern in non-subsampled shearlet transform domain for bio-medical image retrieval. *Mathematical Biosciences and Engineering*, 19(2):1609-1632, 2022.
- Hatibaruah, R., Nath, V. J., and Hazarika, D. Computed tomography image retrieval via combination of two local bit plane-based dissimilarities using an adder. *International Journal of Wavelets, Multiresolution and Information Processing*, 19(01):205005819, 2021.
- Gupta, A. K., Mishra, P., Senapati, M., and Sahu, P. P. A novel electrochemical device for naringin quantification and removal from bitter variety of citrus fruits. *Journal of Food Engineering*, 306:110637, 2021.
- Saha, R., Goswami, R., Bhowmick, B., and Baishya, S. Comprehensive investigation of radiofrequency/analog parameters in a ferroelectric tunnel field-effect transistor. *Semiconductor Science and Technology*, 37(3):035008, 2022.

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- Gupta, A. K., Das, S., Sahu, P. P., and Mishra, P. Design and development of IDE sensor for naringin quantification in pomelo juice: An indicator of citrus maturity. *Food chemistry*, 377:131947, 2022.
- Baruah, R. K., Mahajan, B. K., Chen, Y. P., and Paily, R. P. A Junctionless Silicon Carbide Transistor for Harsh Environment Applications. *Journal of Electronic Materials*, 50(10):5682-5690, 2021.
- Kumar, V., Parida, M. K., Goswami, R., and Deb, D. Model for predicting the threshold voltage of tunnel field-effect transistors using linear regression. *Journal of Electronic Materials*, 50(11):6015-6019, 2022.
- Muchahary, D., Ram, L. S., Narzary, R., Sahu, P. P., Bhattarai, S. and Tayal, S. Heterojunction between crystalline silicon and nanocomposite coupled ZnO· SnO2 and optimization of its photovoltaic performance. *Current Applied Physics*, 38:15-21, 2022.
- Kalita, A. J., Sahu, P. P., Borah, R. R., Rohman, S. S., Kashyap, C., Ullah, S. S., Baruah, I., Mazumder, L. J., Konwar, D., and Guha, A. K. Neutral all metal aromatic half-sandwich complexes between alkaline earth and transition metals: an ab initio exploration. *Structural Chemistry*, 32(6):2313-2318, 2021.
- Roy, J., Bhattacharya, S., Sahu, P. P., and Das, A.B. Physical, mechanical, and electrical properties of rice starch-based films plasticised by ionic liquid. *Indian Chemical Engineer*, 1-12, 2021.
- Baruah, S. M. B., Nandi, D., Gogoi, P., and Roy, S. Primate vision: a single layer perception. *Neural Computing and Applications*, 33(18):11765-11775, 2021.

Publication of Books

- Mishra, P. and Sahu, P. P. *Biosensors in Food Safety and Quality: Fundamentals and Applications*. CRC Press, 1st edition, 2022.
- Maity, S., and Sahu, P. P. *Biosensors in Food Safety and Quality*. CRC Press, 1st edition, 2022.
- Goswami, R. and Saha. *Contemporary Trends in Semiconductor Devices: Theory, Experiment and Applications.* Springer Nature, 2022.
- Goswami, R. *Carbon nanomaterial electronics: devices and applications*. Singapore Springer, 2021.
- Arora, J. S. Introduction to optimum design. Elsevier Inc., San Diego, CA, 2nd edition, 2004.
- Davis, L. S., Johsnon, K. N., Bettinger, P. S., and Howard, T. E. *Forest Management*. McGraw Hill, Boston, 2021.
- Openshaw, S. and Abrahart, R. J. *Geocomputation: A Primer*. John Wiley & Sons, Chichester, UK, 2004.

Publication of Book Chapters

- Saharia, T., Baruah, R. K., Goswami, R., and Sonowal, D. Validation and Implementation of a Smart Flood Surveillance System Based on Wireless Sensor Network. In Lenka, T. R., Misra, D., Biswas, A. (eds), Micro and Nanoelectronics Devices, Circuits and Systems, volume 781, pages 471-479, springer, Singapore, 2022.
- Phukan, N., M, Kakoty, N., Gupta, N., and Baruah, N. EEG-Based Hand Movement Recognition: Feature Domain and Level of Decomposition. In Rao, Y.V. D., Amarnath, C., Regalla, S. P., Javed, A., Singh, K. K. (eds), *Advances in Industrial Machines and Mechanisms*, pages 311-320, Springer, Singapore, 2021.
- Tyagi, A., Biswas, B., Arun Kumar, G., and Mondal, B. Design and Simulation of a W-Band FMCW Radar for Cloud Profiling Application. In: Laxminidhi, T., Singhai, J., Patri, S.R., Mani,

V.V. (eds), Advances in Communications, Signal Processing, and VLSI, volume 722, pages 213-217, Springer, Singapore, 2021.

- Tyagi, A., Biswas, B., Kumar, G. A., and Mondal, B. Design and Simulation of a Dual-Band Radiometer for Humidity and Temperature Profiling. In: Laxminidhi, T., Singhai, J., Patri, S. R., Mani, V. V. (eds), *Advances in Communications, Signal Processing, and VLSI*, volume 722, pages 83-89, Springer, Singapore, 2021.
- Das, K., Khan, A., Sarkar, A., Baishya, P., Kakoty, P., and Baruah, S. Study of TiO₂ and ZnO Nanostructures as Wide Band Gap Semiconductor for the Application of Nanotechnology-Based Solar Cells. In: Bora, P.K., Nandi, S., Laskar, S. (eds), *Emerging Technologies for Smart Cities*, volume 765, pages 77-83, Springer, Singapore, 2021.
- Das, K., and Sharma, S. Eco-routing navigation systems in electric vehicles: A comprehensive survey. In Krishnamurthi, R., Kumar, A., Gill, S. S. (eds), *Intelligent Data-Centric Systems, Autonomous and Connected Heavy Vehicle Technology, Academic Press*, pages 95-122, 2022.
- Sharma, S., Hazarika, C., and Neroula, S. Significance of Optimal Positioning of the Reference Electrode for an ISFET. In Goswami, R., and Saha, R. (eds), *Contemporary Trends in Semiconductor Devices*, volume 850, pages 197-223, Springer, Singapore, 2022.
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Publication of Articles in Conference Proceedings

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- Deb, D., Goswami, R., Baruah, R. K., Kandpal, K., and Saha, R. An SOI npn double gate TFET for low power applications. In *Devices for Integrated Circuit* (DevIC), pages 621-623, 2021.
- Gogoi, M. P., Sarkar, B. C., and Goswami, R. Electrical Performance and Biosensing Application of Silicon Nanowire FET. In *International conference on Nanomaterials*, 2021.
- Sharma, Hussung and Deka. Performance Analysis of Classification Algorithms for Millimeterwave Imaging. In *16thEuropean Conference on Antennas and Propagation* (EuCAP), pages1-5, 2022.
- Barman, T., Deka, B., and Prasad, A.V.V. GPU-accelerated adaptive dictionary learning and sparse representations for multispectral image super-resolution. In *IEEE 18th India Council International Conference* (INDICON) pages 1-7 2021.
- Deka, D., and Deka, B. A. Decision Support System for Prediction of Paroxysmal Atrial Fibrillation based on Heart Rate Variability Metrics. In *IEEE 18th India Council International Conference* (INDICON), pages 1-7, Guwahati, 2021.
- Sharma, R., Deka, B., Fusco, V. and Yurduseven, O. Towards a convolutional neural network coupled millimetre-wave coded aperture image classifier system. In *Passive and Active Millimeter-Wave Imaging XXIV*, Volume 11745, pages 75-84, 2021. SPIE.
- Boruah, A., Ali, T., Kakoty, N. M., and Malarvili, M. B. OROnto: An Ontology for Recognition of Grasping Objects. In *IEEE 18th India Council International Conference* (INDICON), pages 1-6, 2021.
- Phukan, H., Barman, P., Saikia, N. R. and Sharma, S. Design and Development of Resonant Gate Drive Circuit for High Power Drive Applications. In *International Conference on*

Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT), pages 1-7. 2021.

Publication of Patents

| Inventor(s) | Inventor(s) Patent Title | | Published/ | Country |
|---------------------|--------------------------|--------------------|------------|---------------|
| | | Number | Granted | |
| Nayan M. Kakoty and | An EMG based Prosthetic | Patent Application | Published | India (Funded |
| Lakhyajit Gohain | Hand Controller for Real | No. 201931049269 | | by TIFAC, |
| | Time Grasping realizing | | | DST, Govt. of |
| | Neuromuscular Constraint | | | India) |

Invited Talk

| Name of Faculty Member | Title of the Talk | Title of the Event | Date | Organizer and Venue (Online/Offline) |
|------------------------------|--|--|------------|---|
| Dr Rupam Goswami | Simulation and Modeling of Tunnel FETs | One Week Lecture Series | 24-01-2022 | Department of Electronics and Telecommunication Engineering, and Department of Computer Science and Engineering, Assam Engineering College, Guwahati in collaboration with Department of Electronics and Communication Engineering, GUIST, Gauhati University |
| Dr Rupam Goswami | Reviving The Single p-n Junction TFETs | 5-Day Online Faculty Development Programme on Advanced Semiconductor Material and Devices | 11-01-2022 | Micro and Nano devices Research Group, School of Electronics Engineering (SENSE), Vellore Institute of Technology Chennai Campus |
| Dr Rupam Goswami | The Squirrel's Technique: doing research the 'easy' way | 5-Day Faculty Development Programme on 'Research Methodologies and Software based Tools for Research | 27-12-2021 | Dr. Sudhir Chandra Sur Institute of Technology & Sports Complex, Kolkata, India, Online |

Awards/Honours/Notable Achievements

| Name of Awardee | Designation of Awardee | Achievement | Event/Awarded by |
|-----------------|-------------------------------|----------------------------|--------------------|
| Dr. Rupam | Assistant Professor | Young Scientist Award 2021 | ASTEC, DST Govt of |
| Goswami | | | Assam |

Other Significant Activities of the Department/Centre (e.g., outreach/extension activities, events organized, etc.)

- Hands-on training STUTI 2022
- ELDES 2022 Webinar series on Electronic Devices and Systems

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|--------------------|
| GATE 2021 | 2 | B. Tech. |
| <i>GATE 2022</i> | 2 | B.Tech |

Notable Placement of Students

| Name of Student | Academic | Placement Designation | Company/ | Mode of |
|------------------------|------------------|---------------------------------------|-----------------------------|-----------|
| | Programme | | Organization | Selection |
| Sukrit Jyoti Baruah | B. Tech. | Member Technical Staff | Ziroh Labs | On-Campus |
| Sneha Deb Roy | B. Tech. | Graduate Trainee | BIAS Info Tech Pvt. Ltd. | On-Campus |
| Mitali Das | B. Tech. | Graduate Trainee | BIAS Info Tech Pvt. Ltd. | On-Campus |
| Manisha Rajak | B. Tech. | Graduate Trainee | BIAS Info Tech Pvt. Ltd. | On-Campus |
| Kingshuk Jyoti Nath | B. Tech. | Associte | Federal Bank | On-Campus |
| Sonia Kumari | B. Tech. | Application Development Associte | Accenture | On-Campus |
| Tejan Hazarika | B. Tech. | Application Development Associte | Accenture | On-Campus |
| Sneha Deb Roy | B. Tech. | Assistant System Engineer- Trainee | TCS | On-Campus |
| Nishiraj Nath | B. Tech. | Assistant System Engineer- Trainee | TCS | On-Campus |
| Susmita Mishra | B. Tech. | Assistant System Engineer- Trainee | TCS | On-Campus |
| Vandana Goyari | B. Tech. | | ITC Infotech | On-Campus |
| Bhargav Jyoti Nath | B. Tech. | | ITC Infotech | On-Campus |
| Jugabrta Nath | B. Tech. | | ITC Infotech | On-Campus |
| Manish Kr Purbey | B. Tech. | | ITC Infotech | On-Campus |
| Himsikhar Deka | B. Tech. | Programmer analyst Trainee | Congnizant Technologies | On-Campus |
| Susmita Mishra | B. Tech. | Programmer analyst Trainee | Congnizant Technologies | On-Campus |
| Chiranjib Kashyap | B. Tech. | Programmer analyst Trainee | Congnizant Technologies | On-Campus |
| Monika Sharma Giri | B. Tech. | Analyst | Capgemini | On-Campus |
| Rajdeep Das | B. Tech. | Systems Engineer | Infosys | On-Campus |
| Puja Singh | B. Tech. | Systems Engineer | Infosys | On-Campus |
| Vikash Kumar Singh | B. Tech. | Project Engineer | Wipro | On-Campus |
| Tapasi Misra | M. Tech. ELDT | Graduate Trainee | BIAS Info Tech Pvt. Ltd. | On-Campus |
| Pooja Nath | M. Tech. ELDT | Graduate Trainee | BIAS Info Tech Pvt. Ltd. | On-Campus |
| Sangeeta Singha | M. Tech. Bio | Graduate Trainee | BIAS Info Tech Pvt. Ltd. | On-Campus |
| Lakhyajit Gohain | M. Tech. Bio | Graduate Trainee | BIAS Info Tech Pvt. | On-Campus |

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| | | | Ltd. | |
|---------------------------------|-------------------------|--|------------------------------|-----------|
| Mohamad Adil | M. Tech. | Trainee Engineer | Smartsoc Solutions | On-Campus |
| | ELDT | | | |
| Mohamad Adil | M. Tech. | Assistant System Engineer- | TCS | On-Campus |
| | ELDT | Trainee | | |
| Piyush Thakur | M. Tech. | Programmer analyst Trainee | Congnizant | On-Campus |
| | ELDT | | Technologies | |
| Deepjyoti Deb | M. Tech. | JRF | Tezpur University | On-Campus |
| ~ | ELDT | | (Project) | |
| Shashi Ranjan | M. Tech. | Energy Data analytics | CSIR, Project | On-Campus |
| D : G :1 : | ELDT | | | 0.0 |
| Pori Saikia | M. Tech. Bio | Trainee | Quess | On-Campus |
| Sukrit Jyoti | B. Tech. | Member Technical Staff | Ziroh Labs | On-Campus |
| Baruah Krishanu Dev | D. T1 | A | Concernini | On Commun |
| Sarma | B. Tech. | Analyst | Capgemini | On-Campus |
| Baishali Ghosh | B. Tech. | Analyst | Capgemini | On-Campus |
| Pratiksha Boruah | B. Tech. | Graduate Engineer Trainee | Alstom | On-Campus |
| Sanjana Singha | B. Tech. | Graduate Engineer Trainee | Alstom | On-Campus |
| Ajanta Das | B. Tech. | Graduate Engineer Trainee | Alstom | On-Campus |
| Tanisha | M. Tech. | Post Graduate Engineer | Alstom | On-Campus |
| Choudhury | ELDT | Trainee | 7 HStolli | On Campus |
| Monik Talagatla | B. Tech. | Graduate Engineer Trainee | L&T ECC | On-Campus |
| Keerthan Reddy | B. Tech. | Analyst Trainee | Cognizant Technologies | On-Campus |
| Konnela | | | | |
| Ahmed Murtaza | B. Tech. | Analyst Trainee | Cognizant Technologies | On-Campus |
| Monjit Chetry | B. Tech. | Analyst Trainee | Cognizant Technologies | On-Campus |
| Nitumoni Kalita | B. Tech. | Analyst Trainee | Cognizant Technologies | On-Campus |
| Amar Kumar Sah | B. Tech. | Analyst Trainee | Cognizant Technologies | On-Campus |
| abhinab saikia | B. Tech. | Analyst Trainee | Cognizant Technologies | On-Campus |
| Saurav Suman | B. Tech. | Analyst Trainee | Cognizant Technologies | On-Campus |
| Akshay Kumar | B. Tech. | Project Engineer | Wipro | On-Campus |
| Monik Talagatla | B. Tech. | Project Engineer | Wipro | On-Campus |
| Keerthan Reddy | B. Tech. | Project Engineer | Wipro | On-Campus |
| Konnela | | | | |
| Monjit Chetry | B. Tech. | Project Engineer | Wipro | On-Campus |
| Mriganka Kumar | B. Tech. | Project Engineer | Wipro | On-Campus |
| Kalita | | | | |
| Nikhil Kumar | B. Tech. | Project Engineer | Wipro | On-Campus |
| Kamal Das | B. Tech. | Project Engineer | Wipro | On-Campus |
| Pavan Sai Chitteti | B. Tech. | Project Engineer | Wipro | On-Campus |
| AMARTYA | B. Tech. | Associte IT Consultant | ITC Infotech | On-Campus |
| MADHAB | D. T. 1 | | | |
| KUNAL DAS | B. Tech. B. Tech. | Associte IT Consultant Associte IT Consultant | ITC Infotech ITC Infotech | On-Campus |
| Akshay Kumar | | | | On-Campus |
| Siddartha Das Arindom Sharma | M.Tech. M. Tech. Bio | Junior Management Grade I | Federal Bank Federal Bank | On-Campus |
| Pritirekha Dutta | M. Tech. Bio | Junior Management Grade I | Federal Bank Federal Bank | On-Campus |
| | M. Tech. ELDT | Junior Management Grade I | | On-Campus |
| Ankita | M. Tech. | Junior Management Grade I | Federal Bank | On-Campus |
| Bhattacharyya | ELDT | - | | |
| Ayan Chakraborty | B. Tech. | | TCS | On-Campus |

| Ayan Chakraborty | B. Tech. | Associate Software | IQVIA | On-Campus |
|------------------|----------|---------------------------|---------------|-----------|
| | | Developer | | |
| Gajanand Kasat | B. Tech. | Associate Software | IQVIA | On-Campus |
| | | Developer | | _ |
| Hemanta Das | B. Tech. | | IGGL | On-Campus |
| Monik Talagatla | B. Tech. | Associate Software | IQVIA | On-Campus |
| | | Developer | | _ |
| Keerthan Reddy | B. Tech. | Graduate Engineer Trainee | L & T Limited | On-Campus |
| Konnela | | _ | | _ |
| Elura Sonowal | B. Tech. | | Federal Bank | On-Campus |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic | Name of other Institute | Enrolled |
|----------------------|----------------------------|------------------------------|-----------|
| | Programme (in TU) | | Academic |
| | | | Programme |
| Rajesh Mandal | M. Tech. in ELDT | IISC Bangalore | Ph.D |
| Bipul Chandra Sarkar | M. Tech. in ELDT | IISc, Bangalore | Ph.D. |
| Deepjyoti Deb | M. Tech. in ELDT | Tezpur University | Ph.D |
| Subham Ghosh | M. Tech. in ELDT | NIT, Silchar | Ph.D. |
| Anjana Bharati Subba | M. Tech. in ELDT | NIT, Silchar | Ph.D |
| Onishaa Saikia | M. Tech. in ELDT | Tezpur University | Ph.D. |
| Tanaya Das | M. Tech. in Bioelectronics | City University of Hong Kong | Ph.D |
| Uddipan Hazarika | M. Tech. in Bioelectronics | Tezpur University | Ph.D. |
| Sohail Ahmed | M. Tech. in ELDT | NIT Silchar | Ph.D. |

DEPARTMENT OF ENERGY

About the Department

The Department of Energy has been one of the vibrant academic departments of the University, marking its existence for last 25 years with a mandate to produce qualified human resources in the field of energy. The other objectives of the Department are to carry out research and extension activities in the field of energy, and to develop new and efficient energy technologies. The Department offers a two-year (four semesters) AICTE-approved M. Tech. programme in Energy Technology and Ph. D. in energy-related areas. Apart from teaching and research, the Department also organizes training programmes, workshops, and seminars in the relevant areas of energy. The Faculty of the Department has completed several international collaborative research projects and has ongoing international collaborative projects with several countries, including the UK, Brazil, South Africa, Sweden, Greece, Italy, and Hungary. Currently, the Department has nine externally funded research projects and two consultancy projects, including a distinguished project under IMPRINT (Impacting Research, Innovation and Technology), Government of India.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|-----------------------------|------------------------|
| M.Tech in Energy Technology | 35 |
| Ph.D | Variable, 3 in 2021-22 |

Thrust Research Areas of the Department

- Renewable Energy Resources: Characterization & Sustainable Applications
- Energy Conservation: Advance Management Addressing Sustainability
- New Energy Systems: Advance Materials, Energy Storage & New Sources

Major Facilities/Equipment available

- Gas Chromatograph
- Oxidation Stability Apparatus
- Auto Bomb Calorimeter
- Gas Analyser
- UV VIS (Spectrophotometer)
- Fuel Cell kit
- Computerized Diesel Engine Test Rig
- Micro Hydel Power Generating Equipment
- Dual Fuel Engine
- Petrol Engine Test Rig
- Closed top Gasifier
- Bio diesel pilot plant
- Muffle Furnace
- Grid Tied SPV training system
- Vacuum furnace
- Wind Electric Generator
- Solar Water Heating System
- 1 kW SPV plant for DoE Garden lighting
- GIS Laboratory with hardware and software

- Biogas plant of capacity 50 m³
- Computation Laboratory equipped with Software and 13 Computers
- AdaptNET E-Lab facility equipped with Sever (2TB) and 18 Computers
- Renewable Energy Powered Mobile Eatery "Jivika"

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------------|---------------------------------|---|---|------------------------------------|--|
| | Debendra Chandra Baruah | Ph.D. (PAU, Punjab) | Energy, emission, rural livelihood, waste to energy | baruahd | 24-09-2009 |
| Professor | Dhanapati Deka | Ph.D. (Tezpur University) | Biofuel & Bioenergy Systems, Development of Renewable Catalyst | dhanapati | 28-07-2011 |
| | Rupam Kataki | Ph.D. (Tezpur University) | Biomass & Biofuel, Energy Environment Interaction | rupam | 28-06-2015 |
| Associate Professor | Sadhan Mahapatra | Ph.D. (IISc, Bangalore) | Biomass gasification, Climate responsive buildings, Energy Conservation & Decentralized Energy Options | sadhan | 13-09-2010 |
| | Pradyumna Kumar Choudhury | Ph.D. (Tezpur University) | Solar Energy, Hybrid Energy System, Energy Conservation, Instrumentation & Control | pkc | 29-07-2016 |
| Assistant Professor | Biraj Kumar Kakati | Ph.D. (IIT, Guwahati) | Fuel Cell & Hydrogen Technology, Electrochemical Energy Systems, Graphene Nanotechnology, Chemical recovery of Precious Metal Catalysts | bkakati | 22-09-2014 |
| | Nabin Sarmah | Ph.D. (Heriot- Watt, Edinburgh) | Solar Energy, Photovoltaic, Energy Systems | nabin | 22-09-2018 |
| | Vikas Verma | Ph.D. (IIT, Roorkee) | Thermal Engineering, | vikas | 12-04-2017 |
| Adjunct Faculty | Sasi K Kottayil | Ph.D. (Jadavpur University) | Smart Microgrids, Solar & Wind Energy, Hybrid Mode of Energy | sasikottayil@g mail.com | 01-07-2021 |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the current position |
|---------------------|-----------------|-------------------------------|--------------------------------------|
| Technical Officer | Madhurjya Borah | madtech | 03-03-2021 |
| Technical Assistant | Tapanjit Borah | tapanji | 06-05-2004 |

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| Laboratory Assistant | Troilokya Lahan | tlahon | 05-08-2011 |
|----------------------|-----------------|---------|------------|
| Lower Division Clerk | Polly Rajbonshi | poli227 | 06-08-2018 |
| Multitasking Staff | Dinesh Bhuyan | dinesh | 01-01-1995 |

Major Research and Development Findings

| Faculty/ Researcher | Salient Research Findings |
|----------------------|---|
| Prof. D. C. Baruah | Region specific characteristics of renewable energy resources (biomass and solar) for planning and utilization in rural Assam (India) are known. Suitability of some phase change materials as thermal storage for solar hot air generator is known. New feedstock and their pretreatment methods for enhancement of performance of anaerobic decomposition are known |
| Prof. D. Deka | Algal based Integrated Biorefinery |
| Prof. D. Deka | Renewable heterogeneous catalyst for lignocellulosic conversion. |
| Dr. Sadhan Mahapatra | A single particle combustion study of coal/biomass fuel mixtures is carried out. The results show that the ignition mass flux of saw dust is higher compared to rice husk and wood. The diameter index for flaming and char combustion are 1.13 to 0.47 and 0.63 to 1.23 and the flaming and char combustion decreases with the increases in surface area/volume ratio. Bioclimatic classification has been done for Sri Lanka. The degree days are estimated for 25 locations of Sri Lanka by using Hourly, ASHRAE, UKMO, Schoenau and Kehring, Hitchin Erb methods. Sri Lanka is classified into the cold zone, hot zone, and intermediate climatic zones. The solar passive design potentials are estimated for all the bioclimatic zones |
| Dr. Vikas Verma | • Solar desalination, Radiant system for space cooling and heating application, Ground source heat pump system |
| Dr. Nabin Sarmah | Fault detection of PV module with Thermography technique. Estimation of seasonal soiling losses of PV modules in Assam. |

Research Projects (Ongoing and New)

| Project Title | Funding Agency | Amount (In INR Lakh) | Duration | Investigator(s) |
|--|-------------------|----------------------------|----------|---|
| Multi Crop Residue Processing Technology Package for Production of Fuel & Fertilizer | IMPRINT-SERB | 216 | 2019-22 | Prof. D C Baruah (PI) Dr. Nabin Sarmah (Co-PI) Dr Satadru Kashyap, (Co-PI) Dr Durlav Sonowal (Co-PI) |
| Strengthening education, research, and innovation for climate smart crops in India AdaptNET | EU, Erasmus+ | 84 | 2018-22 | Prof. D C Baruah (PI) Dr Nirmali Gogoi, (Co-PI) Dr Shailen Deka, (Co-PI) Dr Ratul Kr Baruah (Co-PI) |
| Design and development of an all-purpose smart biogas reactor for household applications | AICTE | 11 | 2019-22 | Prof. D C Baruah |
| Biomass conversion to Fuels and chemicals | AICTE | 23 | 2019-23 | Prof. Rupam Kataki |
| Rural Hybrid Energy Enterprise Systems | DST-SEED | 198 | 2013-22 | Prof. D C Baruah (PI) Dr. Sadhan Mahapatra (Co-PI) |
| Indo-Hungary International | DST | 48.38 | 2021-24 | Prof. Dhanapati Deka |

| Collaborative Research | | | | |
|----------------------------|-------|-------|---------|---|
| Project | | | | |
| Development of Spatial Air | | | | |
| Quality Monitoring System | | | | Dr. Birgi Kumar Kakati (DI) |
| Using Polymer Electrolyte | AICTE | 17.58 | 2022-25 | Dr. Biraj Kumar Kakati (PI) Dr. Nabin Sarmah (Co-PI) |
| Fuel Cell Powered | | | | DI. Nabili Saliliali (Co-PI) |
| Unmanned Aerial Vehicle | | | | |
| Off-grid Solar Power Plant | AICTE | 20.00 | 2021.22 | Dr. Sadhan Mahanatur |
| at Tezpur University | AICTE | 20.00 | 2021-22 | Dr. Sadhan Mahapatra |
| India-UK Centre for | | | | |
| education & Research in | DST | 74.50 | 2017-22 | Dr. Nabin Sarmah |
| clean energy (IUCERCE) | | | | |

Consultancy Projects (Both Ongoing and New)

| Project Title | Funding Agency | Amount (In INR Lakh) | Duration | Investigator(s) |
|--|---------------------|-------------------------|----------|-----------------------|
| Development of a Smart Platform for | SITA, Govt. | 29.81 | 2020-22 | Prof. D C |
| Promotion of Renewable Energy in Assam | of Assam | 29.01 | 2020-22 | Baruah |
| Water quality baseline survey and follow- up monitoring assessment of hydrological and biological status of streams in upper watersheds for Water resource Conservation (COSFOM) | Govt. of Manipur | 58.98 | 2022-27 | Prof. Rupam Kataki |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Hiloidhari, M., Vijay, V., Banerjee, R., Baruah, D.C., Rao, A.B. (2021). Energy-carbon-water footprint of sugarcane bioenergy: A district-level life cycle assessment in the state of Maharashtra, India. *Renewable and Sustainable Energy Reviews*, 151:111583.
- Chetia, J., Gogoi, N., Baruah, D.C., Fouassier, N. and Sippel, F. (2021). Potential use of bioenergy power plant residue biochar in mitigating N₂O emission from acidic sandy loam soils: a comparative study. *Environmental Sustainability*, 4(2): 365–373.
- Baruah, D. and Baruah, D.C. (2021). Decision support system-based planning of biomass gasification system for decentralized energy generation. *Renewable Energy Focus*, 38: 22-35.
- Khatua, S., Krishnaraj, C., Baruah, D.C., Van, Der Voort P. and Jena, H.S. (2021). Flexible luminescent non-lanthanide metal-organic frameworks as small molecules sensors. *Dalton Transactions*, 50:14513-14531.
- Daimary, N, Eldiehy, K. S. H., Boruah, P., Deka, D., Bora, U. and Kakati, B. K. (2022). Potato peels as a sustainable source for biochar, bio-oil and a green heterogeneous catalyst for biodiesel production. *Journal of Environmental Chemical Engineering*, 10(1): 107108.
- Bardhan, P., Eldiehy, K. S., Daimary, N., Gohain, M., Goud, V. V., Deka, D. and Mandal, M. (2022) Structural Characterization of Mixed Rice Straw and Deoiled Algal Cake-Based Substrate as a Potential Bioenergy Feedstock for Microbial Lipids and Carotenoid Production. *Waste and Biomass Valorization*, 13(1):195-212.
- Gohain, M., Eldiehy, K. S. H., Bardhan, P., Laskar, K., Phukan, H., Mandal, M., Kalita, D. and Deka, D. (2021). Bio-ethanol production: A route to sustainability of fuel using bio-based heterogeneous catalyst derived from waste. *Process safety and environmental protection*, 146:190-200.

- Mondal, S. C., Sarma, B., Narzari, R., Gogoi, L., Kataki, R., Garg, A. and Gogoi, N. (2022). Role of pyrolysis temperature on application dose of rice straw biochar as soil amendment. *Environmental Sustainability*, 5: 119–128. DOI: https://doi.org/10.1007/s42398-022-00217-w.
- Sohtun, P., Bora, M., Kataki, R. and Saikia. B. K. (2021). Oxidative Synthesis of Activated Carbon from Lowgrade Indian Tertiary Coal and Its Chemical Characterization. *Journal of Nanoand Electronic Physics*, 13(3).
- Bora, N., Jayswal, V. and Kataki, R. (2021). Investigation of the Capacitive Properties of Chemically Activated Sugarcane Bagasse Biochar for Supercapacitor Application. *Journal of Nano- and Electronic Physics*, 13(3).
- Gohain, P. P., Saha, R., Choudhury, M. G., Kataki, R. and Paul, S. (2021). Synthesis of Mixedphase Barium Titanium Oxide (BaTiO3/Ba2TiO4) Perovskite Catalyst for Biofuel Production. *Journal of Nano- and Electronic Physics*, 13(3).
- Bhuyan, N., Choudhury, N. D., Dutta, B. K., Upadhyaya, K., Saikia, N. and Kataki, R.(2021). Assessment of kinetic parameters, mechanisms, and thermodynamics of Tithonia diversifolia pyrolysis. *Biomass Conversion and Biorefinery*. DOI: https://doi.org/10.1007/s13399-021-01575-x.
- Barton, M. A., Simha, P., Magri, M. E., Dutta, S., Kabir, H., Selvakumar, A., Zhou, X., Lv, Y., Martin, T. Kizos T., Triantafyllou, E., Kataki, R., Gerchman, Y., Herscu-Kluska, R., Alrousan, D., Dalahmeh, S., Goh, E. G., Elenciuc, D., Głowacka, A., Korculanin, L., Tzeng, R. V., Sinha, Ray S., Ganesapillai, M., Niwagaba, C., Prouty, C., Mihelcic, J R. and Vinnerås, B. (2021). Attitudes of food consumers at universities towards recycling human urine as crop fertiliser: A multinational survey dataset. *Data in Brief*, 35:106794.
- Kumar, A., Choudhary, R., Kataki, R. and Kumar, A. (2021). Bioasphalt Binders: Introducing Sustainability in a Non- Renewable Road Construction Material, *Civil Engineering & Construction Review*, 34(4), 34-42.
- Iftiquar, S. M., Najes, R. S. and Mahapatra, S. (2021). Simulation of Growth of Silicon Thin Films on Textured and Non-textured Surface: A Comparative Study. *Silicon*, 13(8):2701-2713.
- Nath, R., Verma, V. and Tarodiya, R. (2022). Optimization of a Radiant System for Hydrothermal Performance Using Taguchi and Utility Concept. *Journal of Thermal Science and Engineering Applications*, 14(2): 021014.
- Tarodiya, R., Verma, V. and Thangavel, S., (2021). A study on utilization of ground source energy for space heating using a nanofluid as a heat carrier. *Heat Transfer*, 50(4):3842 3860.

Publication of Books

- Ghosh, S. K., Nelles, M., Chanakya, H.N. and Baruah, D.C. (ed) (2021). Biomethane through Resource Circularity Research, Technology and Practices, CRC Press, 1st edition.
- Mahapatra, S., Shahbaz, M., Vaccaro, A. and Emilia, Balas V. (2021). *Advances in Energy Technology*. Springer, Singapore, 1st edition.

Publication of Book Chapters

- Baruah, D. C. (2021). Strengthening Research Integrity in Higher Education Institutes. In *Academic Integrity and Research Quality*, pages 88-90. UGC Publication.
- Eldiehy, K S H., Das, V., Borah, D., Mandal, M. and Deka, D. (2021). Strategic approaches to enhance lipid accumulation in microalgae for bioprospecting. In Dalai A., Goud VV, Nanda S and Borugadda V B. Routledge, editors, *Algal Biorefinery Developments, Challenges and Opportunities*, pages 50-84, ISBN 9780367570057. Taylor & Francis Group, London.

- Bhuyan, N., Borah, M. J., Bora, N., Saikia, D., Deka, D. and Kataki, R. (2021). Heterogeneous Nanocatalytic Conversion of Waste to Biodiesel. In *Nano- and Biocatalysts for Biodiesel Production*, pages 249–277. ISBN: 9781119730002. John Wiley & Sons.
- Gupta, K., Bardhan, P., Rather, M. A., Saikia, D., Loying, S., Mandal and M., Kataki, R. (2022). Microbes in Resource and Nutrient Recovery via Wastewater Treatment. In Verma P., editors, *Industrial Microbiology and Biotechnology*, pages 643-665, ISBN: 978-981-16-5213-4. Springer, Singapore
- Gupta, K., Bardhan, P., Saikia, D., Rather, M A., Loying, S., Mandal, M.and Kataki, R. (2022). Microbial Fermentation: Fundamentals and Its Dynamic Prospect in Various Industrial Applications. In Verma P., editor, *Microbiology and Biotechnology*, volume 32, page 5, ISBN: 978-981-16- 5213-4. Springer, Singapore.
- Sarma, B., Gogoi, L., Gogoi and N., Kataki, R. (2022). Crop Plants Under Metal Stress and Its Remediation. In Roy S, Mathur P, Chakraborty AP, Saha SP., editors, *Plant Stress: Challenges and Management in the New Decade*, pages 57-71, ISBN: 978-3-030-95365-2. Springer Nature.
- Deka, A., Bardhan, P., Mandal, M. and Kataki, R. (2022). Nano-biomaterials as a Potential Tool for Futuristic Applications. In Chaudhery MH, Paolo DS., editors, *Handbook of Smart Materials, Technologies, and Devices*, pages 1-33, ISBN: 978-3-030-58675-1. Springer, Singapore
- Bardhan, P., Deka, A., Bhattacharya, S. S., Mandal, M. and Kataki, R. (2022). Economical aspect in biomass to biofuel production. In Yusup S, Rashidi NA., editors, *Value-Chain of Biofuels: Fundamentals, Technology, and Standardization*, pages 395-427, ISBN: 978-0-12-824388-6. Elsevier.
- Kataki, R. and Kataki, M. D. (2022). Weeds as a renewable bioresource: prospects for bioconversion to biofuels and biomaterials through a cascade of approaches. In Gurunathan B, Sahadevan R, Zakaria ZA., editors, *Biofuels and Bioenergy -Opportunities and Challenges*, pages 437-461, ISBN: 978-0-323-85269-2. Elsevier.
- Gogoi, L., Narzari, R., Chutia, R. S., Borkotoki, B., Gogoi, N. and Kataki, R. (2021). Remediation of heavy metal contaminated soil: Role of Biochar. In *Advances in Chemical Pollution, Environmental Management and Protection*, volume 7, pages 39-63, ISSN: 2469-9289. Elsevier.
- Bhuyan, N., Bora, N., Narzari, R., Boruah, K. and Kataki, R. (2021). Thermo-Catalytic Conversion of Non-Edible Seeds (Extractive-Rich Biomass) to Fuel Oil. In Shadangi KP., editor, *Liquid Biofuels: Fundamentals, Characterization, and Applications*, pages 285-360, ISBN:9781119791980. Willey.
- Bhuyan, N., Dutta, A., Mohan, R., Bora, N. and Kataki, R. (2021). Advances in Nanotechnology for Biofuel Production. In Praveen Kumar R, Bharathiraja B., editors, *Nanomaterials: Application in Biofuels and Bioenergy Production*, pages 533-562, ISBN: 9780128224014. Elsevier.
- Bordoloi, N., Narzari, R., Choudhury, P. K. and Kataki, R. (2021). Bioconversion of Food Waste into Biogas. In Inamuddin, Khan A., editors, *Sustainable Bioconversion of Waste to Value Added Products*, pages 81-94, ISBN: 978-3-030-61836-0. Springer.
- Mazumdar, N..J, Kataki, R. and Pant, K. K. (2021). Furfural and Chemical Routes for its Transformation into Various Products. In Pant K.K, Gupta S.K, Ahmad E., editors, *Catalysis for Clean Energy and Environmental Sustainability: Biomass Conversion and Green Chemistry*, pages 705-719, ISBN: 978-3-030-65016-2. Springer.
- Choudhury, N. D., Bhuyan, N., Narzari, R., Saikia, R., Seth, D., Saha, N. and Kataki, R. (2021). Various conversion techniques for the recovery of value-added products from tea waste. In Bhat

R., editors, *Valorization of Agri-Food Wastes and By-Products*, pages 237-265, ISBN: 978-0-12-824044-1. Elsevier.

Publication of Articles in Conference Proceedings

- Dev Choudhury, N., Saha, N. and Kataki, R. (2021). A study on the improvement of cold flow behavior and thermal-oxidation stability of Camellia sinensis assamica (tea) oil lubricants as industrial lubricant. In *IOP Conference Series: Materials Science and Engineering*, Volume 1070, no. 1, pages 012124. IOP Publishing.
- Saha, A. C., Verma, V., Tarodiya, R., Mahboob, M. R. and Kumar, R. (2021). Analytical modelling of a radiant cooling system for thermal performance analysis. In *Materialstoday Proceeding*, volume 47, pages 2474 2480, Bengaluru, Elsevier.
- Thangavel, S., Verma, V., Tarodiya, R. and Kaliyaperumal, P. (2021). A study on optimization of horizontal ground heat exchanger parameters for space heating application. In *Materialstoday Proceeding*, volume 47, pages 2293 2298, Bengaluru, Elsevier.
- Saikia, S, Verma, V., Kakati, B. K., Thangavel, S. and Tarodiya, R. (2022). Optimization of solar integrated electrolyser system for hydrogen production using Taguchi method. In *Materialstoday Proceeding*, volume 49, pages 397 402, Bengaluru, Elsevier.
- Sarma, R., Tamuly, A. and Kakati, B.K. (2022). Recent developments in electricity generation by Microbial Fuel Cell using different substrates. In *Materials Today: Proceedings*, volume 49, pages 457-463, Elsevier.
- Thangavel, S., Verma, V., Tarodiya, R. and Kaliyaperumal, P. (2021). Comparative analysis and evaluation of different working fluids for the organic rankine cycle performance. In Materialstoday *Proceeding*, volume 47, pages 2580 2584, Bengaluru, Elsevier.
- Lakhanlal and Kakati, B.K. (2022). Synthesis of nitrogen and sulfur-nitrogen co-doped carbonbased oxygen reduction reaction catalyst from rice straw and reeling waste of muga silk (Anthraea assamensis). In *Materials Today: Proceedings*, volume 54 (03), pages 628-636. Elsevier.

Publication of Articles in Other Forms

• NIRF2021: An analysis, Baruah, D. C., The Assam Tribune, September 29, 2021

| Name of Faculty/Staff Member | Purpose of Attending | Title of Event | Date/Period | Organizer and Venue |
|------------------------------------|-------------------------|---|---------------------|--|
| Prof. D. Deka | Participation | Leadership for Academicians Programme (LEAP) | December 5-10, 2021 | University of Pennsylvania, USA (PENN) -Offline. |

Conference/Workshop/Symposium/Seminar etc. Attended

Invited Talk

| Name of Faculty Member | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|---------------------------|--------------------|------------------------|------------|-----------------------------|
| Prof. D. C. | Importance of data | Skill Development | 15-03-2022 | Department of |
| Baruah | for Sustainable | through Impact | | Agricultural Statistics and |
| | Development of | Analysis of Emerging | | Department of |
| | Agriculture | Data with Agricultural | | Agricultural Engineering |
| | | Technology in | | of Assam Agricultural |
| | | Population Sciences | | University, Jorhat, Assam |

| Prof. D. C. | Energy for Peace | 1 st Online Program of | 06-03-2022 | in association with Indian Agricultural Statistics Research Institute (IASRI), ICAR / Online Axomiya Club, Tezpur |
|-------------------------|--|---|----------------------------|---|
| Baruah | and Development | Axomiya Club, Tezpur | | online |
| Prof. D. C. Baruah | NAAC Accreditation: Reflection of Institutional Quality | NAAC Revised Accreditation Framework (RAF): Its Relevance in the Present Higher Education Paradigm in India | 01-03-2022 | S. S. College, Hailakandi, Assam College Development Council, Assam University, Silchar / Online |
| Prof. D. C. | Energy | Training Programme | 21-12-2021 | KVK, Sonitpur, Napam |
| Baruah | conservation opportunities in crop production | for input dealers of Assam | | |
| Prof. D. C. Baruah | Development of Indigenous Technology in Energy Security in the context of Assam | Vigyan Utsav | 20-12-2021 | Assam Science Technology and Environment Council, Guwahati |
| Prof. D. C. Baruah | Empowering the Youth of Northeast India Through the Advancement of Technology and Skill | Two-Day Youth Conclave | 09-12-2021 | Chandraprabha Saikiani Centre for Women Studies Tezpur University/ Academic Council Hall, Tezpur University |
| Prof. Rupam Kataki | Biowaste Biorefinery – Recovery of Bioenergy and Biomaterials | ICAR sponsored winter school on Crop Residues utilization and management for clean energy and environment | 23 Feb - 15 March, 2022 | Agricultural Energy and Power Division of ICAR-Central Institute of Agricultural Engineering, Bhopal, MP, India. |
| Prof. Rupam Kataki | Biorefinery approach for biowaste Valorization | International Environmental Engineering Webinar Series (Enviro Web talk 2021) | 17-22 May, 2021 | School of Civil Engineering, Lovely Professional University, Punjab, India. |
| Prof. Rupam Kataki | Biowaste to bioenergy & biomaterials: An approach towards circular economy. | International Conference on Biotechnology for Sustainable Agriculture, Environment and Health (BSAEH 2021) | 04-08 April, 2021 | Malaviya National Institute of Technology, Jaipur and the Biotech Research Society, India at Jaipur, India |
| Dr. Sadhan Mahapatra | - | Faculty Induction Programme | 01-09-2021 | Teaching Learning Center, Tezpur University |
| Dr. Sadhan | Appropriate | State Level Resource | 05-07-2021 | ASTEC, Guwahati |

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| Mahapatra | Technology for | Person Training | |
|-----------|--------------------|-----------------|--|
| | Sustainable Living | Workshop | |

Awards/Honours/Notable Achievements

| Name of Awardee | Designation of Awardee | Achievement | Event/Awarded by |
|------------------|-------------------------------|--------------------------|--------------------------------|
| Prof. D C Baruah | Faculty member | Received formal offer | Alternate Energy Division, |
| | | for collaboration in the | Indian Oil Corporation Limited |
| | | areas of bio-CBG | |
| Dr. Vikas Verma | Faculty member | Best Paper Award | International Conference on |
| | | | material and System |
| | | | Engineering- (ICMSE-2021) |

Other Significant Activities of the Department/Centre

- As part of the Azadi Ka Amrit Mahotsav Celebration of the Department of Energy, a Workshop on Biogas System: Multifaceted benefits through Community participation is organized on 16th March 2022 at Jhawani village, Sonitpur, Assam, Co-ordinated by Prof. D. C. Baruah
- As part of the Azadi Ka Amrit Mahotsav Celebration of the Department of Energy, Prof Subhas C Bhattacharyya, De Montfort University, UK delivered the Distinguished Lecture 1 on 'Net Zero Emissions and the role of Research in Universities' on 16th December 2021, Co-ordinated by Dr. S. Mahapatra
- A workshop on 'Good Academic Research Practices (GARP)' was organized as a part of the celebrations of 'Azadi Ka Amrit Mahotsav' in the Department of Energy on 9th December 2021, Co-ordinated by Dr. N. Sarmah
- As part of its Silver Jubilee celebration, an e-conclave on "Promotion of Biogas through SATAT and GOBARDHAN: Aspiration and Roadmap for Northeast INDIA" [pratidintime, nenow, etvbharat, eastnews] is organized during 30-31 August, 2021, Co-ordinated by Prof. D. C. Baruah
- As part of the Silver Jubilee Celebration of the Department, a series of Alumni Talk, is organized in virtual mode (Google meet) starting from 12th April, 2021to 7th January 2022, Co-ordinated by Dr. S. Mahapatra.
- A workshop on 'Green House Gas Mechanisms & SD Vista' was organized as a part of the celebrations of 'Azadi Ka Amrit Mahotsav' in the Department of Energy on 7-8th February 2022, Co-ordinated by Dr. N. Sarmah

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|-----------------------------|
| GATE | 01 | M.Tech in Energy Technology |
| NET | 01 | M.Tech in Energy Technology |

Notable Placement of Students

| Name of Student | Academic Programme | Placement Designation | Company/ Organization | Mode of Selection |
|----------------------|--------------------------------|--------------------------|-----------------------------|----------------------|
| Debarshi Das | M.Tech in Energy Technology | Manager | Brightspark India Pvt. Ltd. | Off-Campus |
| Chandan Kumar Sah | M.Tech in Energy Technology | Associate | Brightspark India Pvt. Ltd. | Off-Campus |

| Enrollment of Students in other | Institutes for Higher Studies |
|--|-------------------------------|
|--|-------------------------------|

| Name of Student | Academic Programme | Name of other Institute | Enrolled Academic Programme |
|--------------------|-----------------------------|----------------------------|--------------------------------|
| Avik Ghosh | M.Tech in Energy Technology | IIT, Hyderabad | Ph.D |
| Bikram Chakraborty | M.Tech in Energy Technology | NIT, Agartala | Ph.D |

DEPARTMENT OF FOOD ENGINEERING AND TECHNOLOGY

About the Department

The Department of Food Engineering and Technology (FET) was established in the year 2006 with the aim of creating skilled human resources in the engineering aspect of food processing in order to cater to the needs of the rapidly growing food processing sector. Since its inception the Department has been imparting Post Graduate education in food processing and technology. The B. Tech. programme in Food Engineering and Technology (FET) is approved by the All India Council for Technical Education (AICTE) and has the accreditation of the National Board of Accreditation (NBA) as a Tier-I programme. The M. Tech. in Food Engineering and Technology (FET) is also approved by the AICTE. AICTE offers PG Scholarship to GATE qualified students joining the M. Tech. programme of the Department. The Department also offers Ph.D. in Food Engineering and Technology and students may be admitted through AICTE Doctoral Fellowship (ADF), NET/JRF, GATE etc.

The department has well-developed laboratories for teaching and research created from grants received from various agencies viz., HRD grant from the Ministry of Food Processing Industries (MoFPI), Govt. of India, grant under the FIST programme (Level I) from the Department of Science and Technology (DST), grant under the UGC-SAP (DRS-I) programme of the University Grant Commission, and grant under the NEQIP Scheme of the AICTE. To cater the requirements of testing nutritional parameters of various food items by food industries and with the support from the MoFPI, the Department has established NABL accredited Food Quality Control Laboratory (FQCL). The Department has been recognized as the State Level Technical Institute (SLTI) for Assam and Meghalaya under the PM-FME scheme (PM Formalization of Micro food processing Enterprises Scheme) of Ministry of Food Processing Industries (MoFPI), GoI, New Delhi.

Research activities at the Department are supported by sponsoring agencies like UGC, MoFPI, DST, DBT, DRDO, ICAR, AICTE, MSME, ASTEC, etc. Various projects carried out at the Department aims at developing effective and low-cost technologies for the society. Some developed food products and processes have also been patented by the faculties. Workshops, conferences and seminars are organized regularly in the Department to share knowledge among peers to motivate local youths to start their own enterprises.

| Academic Programme | Student Intake |
|---|-------------------------|
| B. Tech in in Food Engineering & Technology | 56 |
| M. Tech in Food Engineering & Technology | 23 |
| PhD in Food Engineering & Technology | Variable, 15 in 2021-22 |

Academic Programmes and Student Intake

Thrust Research Areas of the Department

- Thrust Area-I Value addition of convenience foods
- Thrust Area-II Process Engineering for desired food product characteristics.
- Sub Area-I: Development of low moisture food products (powder, puffed, extruded, dehydrated foods)
- Subarea-II: Development of liquid and semi-liquid food with desired properties
- Sub Area-III: Mechanistic model for designed product properties
- Sub Area-IV: Development of machinery for traditional food products

Major Facilities/Equipment available

- One dedicated library with more than 200 no's of books
- Computer laboratory with more than 30 computers with licensed software like MATLAB
- Hunter Color Spectrophotometer (Hunter Lab, USA)
- Texture Analyser (Stable Micro System, UK)
- Freeze Dryer (Lyolab, India)
- HPLC (Waters, USA)
- Modified atmospheric packaging unit (Vacstar, Sweden),
- DSC-TGA (Netzsch, Germany)
- Encapsulator (Buchi, Switzerland)
- Gas pycnometer (Porous Materials Inc., USA)
- Fermenter (Sartorius, Germany)
- Supercritical fluid extraction system (Waters, USA)
- Rheometer (Anton Paar, Austria)
- PCR (Eppendorf, USA)

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------------|---------------------------------------|---|---|------------------------------------|--|
| | Charu Lata Mahanta | PhD (CFTRI, Mysore) | Food Biochemistry, Fermented Foods, Food Quality | charu | 07-03-2006 |
| | Sankar Chandra Deka | PhD (HAU, Hissar) | Rice Sc. & Tech. ,Product Development ,Product Quality | sankar | 29-09-2009 |
| | Manuj Kumar Hazarika | PhD (IIT- Kharagpur) | Process modeling, Dairy and Food Process Engineering. | mkhazarika | 16-04-2015 |
| Professor | Brijesh Srivastava | PhD (IIT- Kharagpur) | Food Process Engineering; F&V Processing | brijesh | 19-08-2016 |
| | Nandan Sit | PhD (Tezpur University) | Food & Biochemical Engg, Food Biotechnology | nandan | 26-08-2017 |
| | Poonam Mishra | PhD (Tezpur University) | Food Technology | poonam | 21-09-2020 |
| | Laxmikant Shivnath Badwaik | PhD (Tezpur University) | Food Technology, Fermentation Technology, Food Safety & Laws. | badwaik | 24-06-2020 |
| | Amit Baran Das | PhD (IIT Guwahati) | Food Processing, Food Engineering | amittu | 13-12-2012 |
| Assistant Professor | Nishant Rachayya Swami Hulle | PhD (IIT- Kharagpur) | Food Process Technology, Non thermal processing , Product Development | nishant | 12-01-2017 |
| | Tabli Ghosh | Ph.D. | Edible food packaging, | tabli | 16-12-2021 |

| | (IIT Guwahati) | Food processing, Biobased secondary packaging, Food nanotechnology, Active packaging | | |
|-----------------------------|------------------------------------|---|-----------|------------|
| Nickhil C | Ph.D. (ICAR-IARI, New Delhi) | Food process engineering, Grain storage and structures, Fruits and vegetable processing and machineries | nickhil | 17-12-2021 |
| Soumya Ranjan Purohit | PhD (IIT- Kharagpur) | Food bioprocessing, Rice chemistry and technology, Value addition of local crops | srpurohit | 10-03-2022 |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | 0 | |
|----------------------------|---------------------|-------------------------------|------------------|--|
| | | | current position | |
| Technical Officer | Dr. Dipankar Kalita | dkalita | 10-08-2010 | |
| Senior Technical Assistant | Dr. Arup Jyoti Das | arupdas | 09-10-2015 | |
| Technician | Labadeep Kalita | labadeep | 03-07-2009 | |
| Laboratory Assistant | Swdwmsri Mushahary | swdwm26 | 01-06-2017 | |
| Multi-Tasking Staff | Anjan Keot | akeot | 11-01-1995 | |

Research Projects (both Ongoing and New)

| Project Title | Funding | Amount | Duration | Investigator(s) |
|--|------------|----------|-----------|-----------------|
| | Agency | (in INR) | | |
| Usability of smart phone to evaluate the | LSRB- | 22.53842 | 2018-2021 | Prof. Poonam |
| efficiency of polyaniline based sensor for | DRDO | lakhs | | Mishra |
| indication of freshness of fish fillets during | | | | |
| chemical spoilage | | | | |
| Development of anti-inflammatory functional | MoFPI, | 27.7094 | 2019-2021 | Prof. S.C. |
| food from 'Norabogori' (Prunus persica) of | New Delhi | lakhs | | Deka |
| Assam | | | | |
| Ultrasound assisted rapid immobilization of | AICTE, New | 21.10 | 2019-2022 | Prof. Nandan |
| pectinase on solid support for juice | Delhi | lakhs | | Sit |
| clarification | | | | |
| Non-thermal pulsed light processing of fresh | AICTE, | 25.00 | 2019-2022 | Prof. B. |
| cut fruits of NE India: A novel hurdle | New Delhi | lakhs | | Srivastava |
| approach for predicting enhanced shelf life | | | | |
| and nutritional quality | | | | |
| Solar greenhouse drying system for the | AICTE, | 25.00 | 2019-2022 | Prof. M.K. |
| production of "no cooking" rice from Assam | New Delhi | lakhs | | Hazarika |
| and product quality modelling during storage | | | | |
| Phytochemical profiling and valorization of | MoFPI, | 41.48 | 2021-2023 | Prof. Poonam |
| Pomelo fruit of Northeast India | New Delhi | lakhs | | Mishra |
| Non-thermal processing of Assam lemon | ASTEC, | 1.98 | 2022-2023 | Dr. Nishant R. |
| juice using ozone processing | Assam | lakhs | | Swami Hulle |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Pathaw, P. M. S., Mahanta, C. L., & Bhattacharya, S. (2021). Characteristics of gluten-free rice batter and baked cake made from the flour of heat-moisture-treated paddy of pigmented rice. Journal of Food Processing and Preservation, 45(3): e15206.
- Singamayum, K., Chakraborty, S., Das, M. J., Sit, N., & Deka, S. C. (2021). Wheat and Cassava Flour-Based Composite Formulation of Cookies: Optimization of the Ingredient's Level by Simplex Lattice Design and Sensory Evaluation Using Fuzzy Logic. Journal of Biosystems Engineering, 46(1): 93-103.
- Muchahary, S., & Deka, S. C. (2021). Impact of supercritical fluid extraction, ultrasound-assisted extraction, and conventional method on the phytochemicals and antioxidant activity of bhimkol (Musa balbisiana) banana blossom. Journal of Food Processing and Preservation, 45(7): e15639.
- Sasikumar, R., Das, A. J., & Deka, S. C. (2021). In vitro cytoprotective activity of cyanidin 3glucoside extracts from Haematocarpus validus pomace on streptozotocin induced oxidative damage in pancreatic β-cells. Saudi Journal of Biological Sciences, 28(9): 5338-5348.
- Khurshida, S., Das, M. J., Deka, S. C., & Sit, N. (2021). Effect of dual modification sequence on physicochemical, pasting, rheological and digestibility properties of cassava starch modified by acetic acid and ultrasound. International Journal of Biological Macromolecules, 188, 649-656.
- Samyor, D., Deka, S. C., & Das, A. B. (2021). Physicochemical and phytochemical properties of foam mat dried passion fruit (Passiflora edulis Sims) powder and comparison with fruit pulp. Journal of food science and technology, 58(2): 787-796.
- Gupta, V., Thakur, R., & Das, A. B. (2021). Effect of natural deep eutectic solvents on thermal stability, syneresis, and viscoelastic properties of high amylose starch. International Journal of Biological Macromolecules, 187, 575-583.
- Rohilla, S., & Mahanta, C. L. (2021). Optimization of extraction conditions for ultrasoundassisted extraction of phenolic compounds from tamarillo fruit (Solanum betaceum) using response surface methodology. Journal of Food Measurement and Characterization, 15(2): 1763-1773.
- Chutia, H., & Mahanta, C. L. (2021). Influence of cold plasma voltage and time on quality attributes of tender coconut water (Cocos nucifera L.) and degradation kinetics of its blended beverage. Journal of Food Processing and Preservation, 45(4): e15372.
- Das, A., Bora, B. N., Chutia, H., & Lata Mahanta, C. (2021). Processing of minerals and anthocyanins-rich mixed-fruit leather from banana (Musa acuminata) and sohiong (Prunus nepalensis). Journal of Food Processing and Preservation, 45(9): e15718.
- Gupta, A. K., Mishra, P., Senapati, M., & Sahu, P. P. (2021). A novel electrochemical device for naringin quantification and removal from bitter variety of citrus fruits. Journal of Food Engineering, 306, 110637.
- Gupta, A. K., Dhua, S., Sahu, P. P., Abate, G., Mishra, P., & Mastinu, A. (2021). Variation in phytochemical, antioxidant and volatile composition of pomelo fruit (Citrus grandis (L.) osbeck) during seasonal growth and development. Plants, 10(9): 1941.
- Chakraborty, S., Gautam, S. P., Sarma, M., & Hazarika, M. K. (2021). Adaptive neuro-fuzzy interface system and neural network modeling for the drying kinetics of instant controlled pressure drop treated parboiled rice. Food Science and Technology International, 27(8): 746-763.
- Gautam, S. P., Chakraborty, S., Narjary, A., Deka, J., & Hazarika, M. K. (2021). Application of Instant Decompression-Assisted Steam Curing for Improving Turmeric (Curcuma longa L.) Powder Quality. Journal of Biosystems Engineering, 46(3): 305-315.

- Makinei, L. V., Rizwana, S., & Hazarika, M. K. (2021). Application of flavor network principle of food pairing to Assamese cuisine from North East India. International Journal of Gastronomy and Food Science, 26: 100426.
- Changmai, N. J., & Badwaik, L. S. (2021). Effect of polyvinyl alcohol, starch and modified bee wax on properties of sweet lime pomace based biodegradable containers. Journal of Packaging Technology and Research, 5(2): 107-114.
- Deka, D., & Swami Hulle, N. R. (2021). Supercritical fluid extraction of Bhut Jolokia oleoresin and its quality analysis. SN Applied Sciences, 3(2): 1-12.
- Watharkar, R. B., Chakraborty, S., Srivastav, P. P., & Srivastava, B. (2021). Foaming and foam mat drying characteristics of ripe banana [Musa balbisiana (BB)] pulp. Journal of Food Process Engineering, 44(8): e13726.
- Roy, J., Bhattacharya, S., Sahu, P. P., & Das, A. B. (2021). Physical, mechanical, and electrical properties of rice starch-based films plasticised by ionic liquid. Indian Chemical Engineer, 1-12.
- Das, A. B., Goud, V. V., Das, C., & Sahu, P. P. (2021). Development of Colorimetric pH Indicator Paper Using Anthocyanin for Rapid Quality Monitoring of Liquid Food. Journal of Packaging Technology and Research, 5(1): 41-49.
- Jha, A. K., & Sit, N. (2021). Extraction of bioactive compounds from plant materials using combination of various novel methods: A review. Trends in Food Science & Technology.
- Jha, A. K., & Sit, N. (2021). Comparison of response surface methodology (RSM) and artificial neural network (ANN) modelling for supercritical fluid extraction of phytochemicals from Terminalia chebula pulp and optimization using RSM coupled with desirability function (DF) and genetic algorithm (GA) and ANN with GA. Industrial Crops and Products, 170: 113769.
- Chutia, H., & Mahanta, C. L. (2021). Green ultrasound and microwave extraction of carotenoids from passion fruit peel using vegetable oils as a solvent: Optimization, comparison, kinetics, and thermodynamic studies. Innovative Food Science & Emerging Technologies, 67: 102547.
- Marboh, V., & Mahanta, C. L. (2021). Physicochemical and rheological properties and in vitro digestibility of heat moisture treated and annealed starch of sohphlang (*Flemingia vestita*) tuber. International Journal of Biological Macromolecules, 168: 486-495.
- Chutia, H., & Mahanta, C. L. (2021). Properties of starch nanoparticle obtained by ultrasonication and high pressure homogenization for developing carotenoids-enriched powder and Pickering nanoemulsion. Innovative Food Science & Emerging Technologies, 74: 102822.
- Das, A., & Sit, N. (2021). Modification of taro starch and starch nanoparticles by various physical methods and their characterization. Starch-Stärke, 73(5-6): 2000227.
- Acharjee, A., Afrin, S. M., & Sit, N. (2021). Physicochemical, textural, and rheological properties of yoghurt enriched with orange pomace powder. Journal of Food Processing and Preservation, 45(2): e15193.
- Vivek, K., Subbarao, K. V., & Srivastava, B. (2021). Effect of thin-layer drying on the quality parameters of persimmon slices. International Journal of Fruit Science, 21(1): 587-598.
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- Singha, P., Rani, R., & Badwaik, L. S. (2022). Sweet lime peel-, polyvinyl alcohol-and starchbased biodegradable film: preparation and characterization. Polymer Bulletin, 1-17.
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- Das, M., Devi, L. M., & Badwaik, L. S. (2022). Ultrasound-assisted extraction of pumpkin seeds protein and its physicochemical and functional characterization. Applied Food Research, 100121.
- Neog, B., Das, J. K., Vijayakumar, A., & Badwaik, L. S. (2022). Development and characterization of edible films made with Indian jujube fruit puree and pectin. Journal of Food Process Engineering, 45(3): e13977.
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- Marboh, V., Gayary, M. A., Gautam, G., & Mahanta, C. L. (2022). Comparative Study of Heat-Moisture Treatment and Annealing on Morphology, Crystallinity, Pasting, and Thermal Properties of Sohphlang (Flemingia vestita) Starch. Starch-Stärke, 2100294.
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- Ghosh, T., Priyadarshi, R., de Souza, C. K., Angioletti, B. L., & Rhim, J.W. (2022). Advances in pullulan utilization for sustainable applications in food packaging and preservation: A mini-review. Trends in Food Science & Technology, 125, 43-53
- Priyadarshi, R., Purohit, S. D., Roy, S., Ghosh, T., Rhim, J. W., & Han, S. S. (2022). Antiviral Biodegradable Food Packaging and Edible Coating Materials in the COVID-19 Era: A Mini-Review. Coatings, 12(5), 577.

Publication of Books

• Mishra, P., and Sahu, P.P. (2021). *Biosensor in Food Safety and Quality: Fundamental and application*. Taylor and Francis.

Publication of Book Chapters

- Mishra, P., A K G, Koch, P., and Yadav, A. (2021). Piezoelectric Biosensors: Principle, Techniques, and Their Application in Food Analysis Piezoelectric Biosensors. In Mishra, P., and Sahu, P.P. editors, *Biosensors in Food Quality and Safety: Fundamental and Application*, Taylor and Francis.
- Mishra, P., Yumnam, M, Gupta, A.K., Koch, P., and Medh, M. (2021). Feasibility of Biosensors. In Mishra, P., and Sahu, P.P. editors, *Biosensors in Food Quality and Safety: Fundamental and Application*, Taylor and Francis.
- Mishra, P., Medhi, M., Yumnam, M., Gupta, A.K., Koch, P. (2021). Detection of Heavy Metals in Water Using Biosensor. In Mishra, P., and Sahu, P.P. editors, *Biosensors in Food Quality and Safety: Fundamental and Application*, Taylor and Francis.
- Mishra, P., Gupta, A.K., Koch, P., Yumnam, M., Medhi, M., Madufor, N.J., U. L. Opara. U.L. (2021). Biosensors Involved in Fruit and Vegetable Processing Industries. In Mishra, P., and Sahu, P.P. editors, *Biosensors in Food Quality and Safety: Fundamental and Application*, Taylor and Francis.
- Sahu, P.P., Senapati, M., Singhal, S., Gupta, A.K., Sonowal, D., Mishra, P. (2021) Bio/Chemical Sensors and Microsensors Involved in Meat Industry. In Mishra, P., and Sahu, P.P. editors, *Biosensors in Food Quality and Safety: Fundamental and Application*, Taylor and Francis.
- Bora, J., Tongbram, T., Mahnot, N., Mahanta, C.L., Badwaik, L.S., (2021). *Tocopherol*, In Kour, J., and Nayik, G. Nutraceuticals and Health Care, 259-278, Academic Press.
- Talukdar, P., Das, P.P., and Hazarika, M.K. (2021). Study of Refractance Window Dried Shredded Carrot and Analysis of Its Physical Properties. In Carvajal-Millan, E, Yaser, A.Z., and Haghi, A.K. *Natural Food Products and Waste Recovery*, pp. 117-138, Apple Academic Press.
- Nongmaithem, S. D., & Swami Hulle, N. R. (2022). Nanostructures for improving food structure and functionality. In Food, Medical, and Environmental Applications of Nanomaterials (pp. 231-252). Elsevier.

Publication of Patents

| Inventor(s) | Patent Title | | Publishe/ | Country |
|------------------------|---------------------------------------|---------------|-----------|-----------|
| | | Patent Number | Granted | |
| Manas Jyoti Das and | A process for manufacturing bottle | 2020103333 | Granted | Australia |
| Sankar Chandra Deka | gourd juice | | | |
| Brijesh Srivastava and | A process for manufacture of turmeric | 366731 | Granted | India |
| Dipsikha Kalita | powder from raw turmeric rhizomes | | | |

Awards/Honours/Notable Achievements

| Name of | Designation | Achievement | Event/Awarded by |
|--------------|-------------|---|--------------------------------|
| Awardee | of Awardee | | |
| Dr. Poonam | Professor | SRISTI GYTI AWARD 2021 for the | Gandhian Young |
| Mishra | | project entitled "Battery Less | Technological Innovation |
| | | Electrochemical Sensor for | (GYTI) Awards |
| | | Quantification, Removal of Naringin | by SRISTI (Society for |
| | | and Determination of Maturity of Citrus | Research and Initiatives for |
| | | Fruits | Sustainable Technologies and |
| | | | Institutions) |
| Dr Laxmikant | Professor | Appointed as vice president of | Association of Food Scientists |
| Badwaik | | Association of Food Scientists and | and Technologists, India |
| | | Technologists, India (AFSTI) for 2021 | (AFSTI) |

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|--------------------|
| UGC-NET | 5 | PhD |
| ICAR-NET | 3 | PhD |
| GATE | 5 | B.Tech/PhD |

Notable Placement of Students

| Name of Student | Academic | Placement Designation | Company/Organization | Mode of |
|-----------------|-----------|-------------------------|-----------------------------|------------|
| | Programme | | | Selection |
| Priotush Paul | B.Tech | Territory sales manager | Amul | On campus |
| Arindom Dutta | B.Tech | Quality | Iron Kettle Pvt. Ltd. | Off campus |
| Radifah Kabir | B.Tech | News editor | ABP news | Off campus |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic | Name of other Institute | Enrolled Academic |
|-----------------|-------------------|-------------------------|-------------------|
| | Programme (in TU) | | Programme |
| Raisha Yesmin | B.Tech | NIT Silchar | MBA |

DEPARTMENT OF MECHANICAL ENGINEERING

About the Department

The Mechanical Engineering (ME) department at Tezpur University was established in 2006. The department aims at producing skilled human resources with a strong foundation in ME for the heavy engineering and manufacturing industry. Another mission of the department is to train scholars in handling ME as well as interdisciplinary problems by exploiting their domain knowledge and using the latest technologies. There are 16 regular faculty members, 01 guest faculty member and 01 adjunct faculty member with various specializations and 11 technical staff members in the department. Presently, the department is offering BTech, MTech (Specialization: Machine Design and Thermal and Fluids Engineering) and PhD programmes in Mechanical Engineering. The department has various laboratories with state-of-the-art facilities and one central workshop with all kinds of machinery. Both the BTech and MTech programmes offered in the department are AICTE approved. The BTech programme in Mechanical Engineering is provisionally accredited by NBA, which has been effective from 2019-2021. The department has the vision to emerge as a centre of excellence, producing quality engineers and conducting cutting-edge research.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|--------------------|-----------------------------------|
| BTech | 65 |
| MTech | 23 |
| PhD | Variable (admitted 07 in 2021-22) |

Thrust Research Areas of the Department

- Complex thermal and mechanical system analysis using thermodynamic modelling, computational fluid dynamics and evolutionary based optimization techniques.
- Development and analysis of solar thermal power, cooling, storage and drying systems.
- Development of autofrettage methods, reinforced composites, micro alloying materials and their characterization.

Major Facilities/Equipment available

- Central Workshop
 - CNC Lathe Machine
 - CNC Milling Machine
 - Universal Milling Machine
 - HMT High Speed Precision Lathe
- Fluid Mechanics and Turbo-machinery Lab
 - Bernoulli's theorem demo module
 - Pelton turbine
 - Propeller turbine
- Strength of Material Lab
 - Universal testing machine
 - Inverted metallurgical microscope with accessories and interface software
- Theory of Machine Lab

- Static and Dynamic balancing
- Sound level meter with sound level calibrator
- Vibration Lab
 - Universal vibration apparatus
 - Sound level meter with sound level calibrator
- CAD Lab
 - ANSYS academic teaching
 - Pro-E software
- Metrology Lab
- IC Engine and Automobile Lab
 - Diesel Engine test set up VCR
 - Variable compression ratio petrol engine
 - Computerised single cylinder petrol engine test rig
- Thermal and Heat Transfer Lab
 - VCR and VAR test rig
 - Air conditioning test rig
 - Cooling tower test rig
 - Stefan Boltzmann apparatus
 - Concentric tube heat, shell and tube heat exchanger apparatus
 - Dropwise and filmwise condensation apparatus
 - Emissivity measurement apparatus
 - Critical heat flux apparatus
 - Natural convection heat transfer apparatus
 - VCR petrol engine

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------------|---------------------------|---|---|------------------------------------|--|
| | Dilip Datta | PhD (IIT Kanpur) | Optimization, Mechanical Design | ddatta | 10-02-2014 |
| Professor | Tapan Kumar Gogoi | PhD (Tezpur University) | Thermodynamic modelling, analysis and optimization of thermodynamic cycles and systems | tapan_g | 05-09-2016 |
| | Partha Pratim Dutta | PhD (Tezpur University) | Renewable energy, Thermal engineering, Drying Technology | * * | 26-11-2017 |
| Associate Professor | Paragmoni Kalita | PhD (IIT Guwahati) | Computational Fluid Dynamics and heat transfer | paragmk | 30-01-2021 |
| Assistant Professor | Polash Pratim | PhD (IIT Guwahati) | Precision manufacturing, soft computing, CAD | polashd | 21-02-2008 |

Tezpur University :: Annual Report 2021-22 (Deptt. of Mechanical Engineering)

| | Dutta | | | | |
|--------------|------------|----------------|------------------------------|---------|------------|
| | Sushen | PhD | Machine Design | sushen | 25-08-2008 |
| | Kirtania | (IIT Guwahati) | | | |
| Prabin Haloi | | ME | Mechanical Engineering | haloi_p | 16-07-2010 |
| | | (Gauhati | | | |
| | | University) | | | |
| | Sanjib | PhD | Materials Engineering and | sanjibb | 02-08-2010 |
| | Banerjee | (IIT Guwahati) | Manufacturing | | |
| | Monoj | PhD | Thermal Engineering, | monojb | 30-08-2012 |
| | Bardalai | (Gauhati | Renewable Energy | - | |
| | | University) | | | |
| | Satadru | PhD | Manufacturing, | sanjibb | 07-09-2012 |
| | Kashyap | (Tezpur | Composite Materials, | | |
| | | University) | Materials Science | | |
| | Zahnupriya | PhD | Rehabilitation Robotics, | zk | 26-08-2014 |
| | Kalita | (Tezpur | Optimization | | |
| | | University) | | | |
| | Rakesh | ME | Welding, Machining | r.bhadr | 19-09-2014 |
| | Bhadra | (IIEST, | | | |
| | | Shibpur) | | | |
| | Barnali | PhD | Thermal Engineering, Data | barnali | 02-02-2015 |
| | Chowdhury | (Gauhati | analysis and optimization | | |
| | | University) | | | |
| | Vivek Kr. | PhD | Optimization, Robotics | vkmehta | 07-09-2016 |
| | Mehta | (IIT Kanpur) | | | |
| | Seikh | PhD | Stress analysis, Plasticity, | smkmech | 07-09-2016 |
| | Mustafa | (IIT Guwahati) | Autofrettage, Fracture | | |
| | Kamal | | Mechanics | | |
| | Shikha | MTech | CFD, Renewable energy, | shikha5 | 03-10-2016 |
| | Bhuyan | (NIT Silchar) | Heat transfer | | |
| Guest | Uttam | PhD | Integrated Design and | | 08-02-2021 |
| | Kumar | (IIT | Manufacturing Engineering | | |
| Faculty | Mohanty | Hyderabad) | | | |

Officers and Staff Members

| Designation | Name | <email></email> | Date of holding | |
|----------------------------|-----------------------|-----------------|-----------------|--|
| | | @tezu.ernet.in | the current | |
| | | | position | |
| Technical Officer | Prabin Kumar Bora | pkbora | 10-10-2007 | |
| Senior Technical Assistant | Heman Malakar | heman | 29-06-2009 | |
| Technical Assistant | Guna Kanta Borah | gunakt | 16-08-2007 | |
| | Anupjyoti Nath | anupn | 20-08-2007 | |
| Technician | Dipak Gogoi | dgogoi | 10-01-2007 | |
| | Mitharam Handique | mitharam | 14-08-2007 | |
| | Palash Rabha | prabha | 23-08-2007 | |
| | Khargeswar Rangpi | rangpi | 23-08-2007 | |
| | Sasthendra Kumar Nath | sknath | 14-09-2009 | |
| Draftsmen | Uttam Kumar Nath | uttam | 13-06-2009 | |
| | Bhaskar Baruah | bbaruah | 03-08-2012 | |
| Upper division clerk | Dipanjali Sinha | dsinha | 28-08-2019 | |
| Bearer | Maniram Bania | | 01-01-2008 | |

Research Projects (both Ongoing and New)

| Project Title | Funding | Amount | Duration | Investigator(s) |
|------------------------------------|---------|-------------|-----------|-----------------------------|
| | Agency | (in INR) | | |
| Design Development and | AICTE | 1700000 | 2019-2023 | Dr. Partha Partim Dutta |
| Performance Testing of Solar Dryer | | | | |
| for Drying Garcinia pedunculata | | | | |
| with Thermal energy Storage | | | | |
| Design and development of an | ASTEC | 296000 | 2021-2023 | Dr. Partha Pratim Dutta |
| improved tricycle | | | | |
| Multi-Crop Residue Processing | DST- | 1,43,00,000 | 2020-2023 | PI: Prof. DC Baruah |
| Technology Package for Production | IMPRINT | | | Co-PI: Dr. S Kashyap, Dr. N |
| of Fuel and Fertilizer | | | | Sarmah, Dr. D. Sonowal |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Shukla, A.K., Dutta, Partha P., Bardalai, M., and Dutta, Polash P. (2022). Performance assessment of a single cylinder diesel engine with diesel and waste cooking oil blends preheated by engine exhaust gas. *International Journal of Vehicle Structures & Systems*, 14 (2):150-157.
- Bhagowati, S., Bardalai, M., Dutta, Partha P., and Dutta, Polash P. (2021). Design and Comparative Study of Shell and Tube Heat Exchanger with Different Baffle Configurations. *ADBU Journal of Engineering Technology*, 10 (4):
- Haloi, P. and Gogoi, T.K. (2021). Effects of partially ionized combustible products on the performance of a Magneto-hydrodynamic (MHD)-gas turbine (GT) combined power plant, Part 1: exergy analysis. *Iranian Journal of Science and Technology, Transactions of Mechanical Engineering*, 46: 481-495.
- Kamal S.M. and Dixit U.S. (2021). Design of a disk-mandrel assembly for achieving rotational autofrettage in the disk. *IMechE Part C: Journal of Mechanical Engineering Science*, 235 (13):2452–2467.
- Perl M., Kamal S.M. and Mulera Solomon. (2022) The use of an equivalent temperature field to emulate an induced residual stress field in a rotating disk due to full or partial rotational autofrettage. *ASME Journal of Pressure Vessel Technology*, 144 (6): 061301.

Publication of Books

- Datta, D. (2021). Good Practices and Ethics in Research and Publication. Ane Books Pvt. Ltd., New Delhi, ISBN 978-93-90658-37-4.
- Dash, K. K., Kalita, P. (2022). Solving problems in Fluid Mechanics (GATE XE), Astral International Pvt. Ltd., New Delhi, ISBN:978-93-5461-356-2.

Publication of Book Chapters

- Dutta, Partha. P., Goswami, P., Das, A., Chutia, L., Borbara, M., Das, V., Bania, K., Rai, S., and Bardalai M. (2022). Thermal Performance Studies of an Artificially Roughened Corrugated Aluminium Alloy (AlMn1Cu) Plate Solar Air Heater (SAH) at a Moderate Air Flow Rate. In Kumar N., Prabhansu (Eds). *Renewable Energy for Sustainable Growth Assessment (Ch. 5)*, ISBN: 9781119785361, Scrivener publishing, Wiley Online Library. DOI: https://doi.org/10.1002/9781119785460.ch5
- Bardalai, M., Das, B.K., Chaudhury, I.A., Kumar, S., and Dutta, Partha P. (2022). Heat Transfer Analysis Through Ducts of Different Geometries with Extended Surfaces. In Suhag S., Mahanta C., Mishra S (Eds). *Control and Measurement Applications for Smart Grid, Lecture Notes in*

Electrical Engineering, volume 822, pages 115-128, ISBN: 978-981-16-7663-5. Springer, Singapore.

- Chowdhury, B., and Deb, S.K. (2021). Optimizing Thermoforming of Refrigerator Liners to Reduce Liner Rejection Rate—A Case Study Using Fractional Factorial Design of Experiments. In Manik, G., Kalia, S., Sahoo, S.K., Sharma, T.K., Verma, O.P. (Eds). *Advances in Mechanical Engineering*, pages 225-238, *Lecture Notes in Mechanical Engineering*, ISBN: 978-981-16-0942-8. Springer, Singapore.
- Dutta, P.P., Goswami, P., Sharma, A., Dutta, Polash P., and Baruah, M.G. (2022). Computational performance analysis of the perforated and flat plate double pass solar air heater. In Mahanta A., Kalita P., Paul A., Banerjee A., (Eds). *Advances in Thermo-fluids and Renewable Energy*, pages 549-561, *Lecture Notes in Mechanical Engineering*, ISBN: 978-981-16-3497-0. Springer, Singapore.
- Das, B., Dutta, Polash P., Dutta, Partha P. (2022). Numerical approximation of performance of pneumatic artificial muscles with change in altitude. In Suhag S., Mahanta C., Mishra S (Eds). *Control and Measurement Applications for Smart Grid, Lecture Notes in Electrical Engineering*, pages 219-228, ISBN: 978-981-16-7663-5. Springer, Singapore.

Publication of Articles in Conference Proceedings

- Bardalai, M. (2021). Mathematical Modeling and Performance Evaluation of Flat Plate Solar Collector. In 15th International Conference of IMBIC on Mathematical Sciences for Advancement of Science and Technology (MSAST 2021), Proceedings of IMBIC, volume 10, pages, 76-77, Kolkata, India.
- Das, B., Dutta, Polash P., Bardalai, M., and Dutta, Partha P. (2021). Comparative study on performance of high volume low speed (HVLS) fans with high-speed fans for the use in dairy barns. In *International Conference on Futuristic Research in Engineering Smart Materials 2021*, Materials Today: Proceedings, volume 47, Part 14, pages 4606-4610, Bengaluru, India, Elsevier.
- Dutta, Partha P., Begum, SS., Jangid, H, Goswami, A.P., Doley, T., Bardalai, M., and Dutta, Polash P. (2021). Modeling and performance evaluation of a small solar parabolic trough collector (PTC) for possible purification of drained water. In *International Conference on Futuristic Research in Engineering Smart Materials 2021*, Materials Today: Proceedings, volume 47, Part 14, pages 4226-4234, Bengaluru, India, Elsevier.
- Bora, J. and Kirtania, S. (2021). Enhancement of elastic and fracture properties of carbon nanotube-reinforced aluminum laminated composites. In *National Conference on Materials, Mechanics and Modeling (NCMMM-2020)*, AIP Conference Proceedings, volume 2341, pages 020024-1-020024-10. Jamshedpur, India, AIP Publishing.
- Mahmun, A. and Kirtania, S. (2021). Evaluation of elastic properties of graphene nanoplatelet/epoxy nanocomposites. In *International Conference on Materials, Processing & Characterization,* Materials Today: Proceedings, volume 44, pages 1531-1535, Elsevier.
- Borgohain, P., and Kirtania, S (2021). Finite element analysis of concrete railway sleeper. In *Proceeding of Nat. Conf. on Advances in Mechanical Engineering*, pages 165-169, SVNIT Surat, India.
- Kalita, M. J., Das, P., Mahfuz, T., and Kirtania, S (2021). Finite element analysis of flywheels used for punching operation. In the *Proceeding of Nat. Conf. on Advances in Mechanical Engineering*, pages 155-159, SVNIT Surat, India.
- Kakoty, N. M., Kalita, Z., Boruah, A., Chittawadigi R.G., and Saha S. S. (2021). Development of A Technology Education Programme based on Self-Driven, Self-Learning and Self-Evaluating

Approach. In Advances in Robotics-5th International Conference of The Robotics Society, pages 1-5, IIT Kanpur, India.

- Sharma, A., and Dutta, Partha P. (2021). Exergy analysis of a solar thermal energy powered tea withering trough. In *3rd International Conference on Advances in Mechanical Engineering and Nanotechnology*, Materials Today: Proceeding, volume 47 (11), pages 3123-3128, Elsevier.
- Dutta, P., Dutta, Partha P., Kalita, P., Goswami, P., Choudhury P. K. (2021). Energy Analysis of a Mixed-mode Corrugated Aluminium Alloy (AlMn1Cu) Plate Solar Air Heater. In *3rd International Conference on Advances in Mechanical Engineering and Nanotechnology*, Materials Today: Proceeding, volume 47 (11), pages 3352-3357, Elsevier.

Pedagogy and Content Development

• Dr. V.K. Mehta developed a virtual engineering mechanics laboratory.

| Name of Faculty/Staff Member | Purpose of Attending | Title of Event | Date/ Period | Organizer and Venue (Online/Offline) |
|------------------------------------|-------------------------|---|--|---|
| D. Datta | Chief Guest | Certificate Course in LaTeX | 01-02-2022 | BNN College, Bhiwandi, Maharashtra (Online) |
| | Paper presentation | 15th International Conference of IMBIC on Mathematical Sciences for Advancement of Science and Technology (MSAST 2021) | 21 to 23-12- 2021 | Institute for Mathematics, Bio- informatics, Information-Technology and Computer Science (IMBIC), Kolkata, India (Online) |
| M. Bardalai | Paper presentation | International Conference on Futuristic Research in Engineering Smart Materials (FRESM'21) | 23 to 24-04- 2021 | CMR Institute of Technology, Bengaluru, India (Online) |
| Particij | Participation | Short Term Training Programme on Advanced Engineering Optimization through Artificial Intelligence | 12 to 17-07- 2021 | NERIST, India (Online) |
| D II L . | Participation | Six Days Faculty Development Programme on "Mentorship Program and its Benefits in Technical Institutions" | 7 to 12-03- 2022 | NIT Agartala, India (Online) |
| P. Haloi | Paper presentation | International Conference on Energy Conversion and Thermo- fluid Systems (i-CONECTS 2021) | | MNIT Jaipur, India (Online) |
| S. M. Kamal | Participation | In the honor of Professor Amitabha Ghosh Lecture Series on Evolution of Classical Mechanics and Symposium on Engineering Pedagogy | 5, 6, 12, 13, 19 and 20- 03-2022 2022 | IIT Guwahati (Online) |
| S. Kirtania | Paper presentation | National Conference on Advances in Mechanical Engineering | 27 to 28-05- 2021 | S. V. National Institute of Technology, Surat, India. (Online) |

Conference/Workshop/Symposium/Seminar etc. Attended

| | | | | Г] |
|-----------------------------------|---|---|------------------------|--|
| | Paper presentation | International Conference on Sustainable Approaches In Food Engineering And Technology (SAFETy) | | Tezpur University (Online) |
| | Paper presentation | 2nd International Congress on Advances in Mechanical and Systems Engineering (CAMSE 2021) | | NIT Jalandhar (Online) |
| | Participation | One week Short Term Course on Applications of Vibration and Heat Transfer in Mechanical Engineering (AVHTME 2021). | | NIT Manipur (Online) |
| B. Chowdhury | Participation | One Week online Workshop on Statistical Techniques for Data Analysis | 22 to 26-11- 2021 | NIT Jalandhar (Online) |
| Participation Session Chair | One week Short Term Course on Emerging Trends and Modelling in Advanced Functional Materials and Devices | 28-03-2022 to -01-04- 2022 | NIT Jalandhar (Online) | |
| | | 2nd International Congress on Advances in Mechanical and Systems Engineering (CAMSE 2021) | | NIT Jalandhar (Online) |
| | Reviewer | 2nd International Congress on Advances in Mechanical and Systems Engineering (CAMSE 2021) | | NIT Jalandhar (Online) |
| Partha P. Dutta | Participation | Short Term Training Programme on Advanced Engineering Optimization through Artificial Intelligence | 12 to 17-07- 2021 | NERIST, India (Online) |
| Dutta | Session Chair | International online Conference on Material Science and Technology (ICMTE-2021) | 12 to 14-11- 2021 | Mahatma Gandhi University, Kerala (Online) |
| S. Kashyap | Paper Presentation | International Conference on Sustainable Approaches in Food Engineering and Technology (SAFETy) 2021 | 24-06-2021 | Tezpur University, India (Online) |
| | Paper Presentation | Current Scenario in Chemical Sciences (CSCS2021) | 06 to 07-09- 2021 | Moolji Jaitha College, Jalgaon, Maharashtra (Online) |

Invited Talk

| Name of Faculty Member | Title of the Talk | Title of the Event | Date | Organizer and Venue (Online/Offline) |
|------------------------------|--|--|------------|---|
| D. Datta | Introduction to Nonlinear Optimization Methods | Short Term Training Programme on Advanced Engineering Optimization through Artificial Intelligence | | NERIST, Arunachal Pradesh (online) |
| | Introduction to Multi- Objective | Short Term Training Programme on | 16-07-2021 | NERIST, Arunachal Pradesh (Online) |

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| | Optimization | Advanced Engineering Optimization through | | |
|-----------|------------------------|--|------------|---|
| | | Artificial Intelligence | | |
| | Career Prospects in | Certificate Course in | 01-02-2022 | BNN College, |
| | LaTeX | LaTeX | | Bhiwandi, |
| | | | | Maharashtra (Online) |
| | | Conference on Advances in Petroleum Science and Technology | 29-10-2021 | Dibrugarh University, Assam (online) |
| Polash P. | | Federation of Petroleum | | |
| Dutta | Industries, its recent | | | |
| | advances and research | • | | |
| | opportunities | | | |
| | Paraffine based Phase | International online | 12- | Mahatma Gandhi |
| | 0 | Conference on Material | 14/11/2021 | University, Kerala |
| | | Science and Technology | | (Online) |
| | Storage | (ICMTE-2021) | | |
| | | Innovation Ecosystem in | 19-02-2022 | Technology Enabling |
| Partha P. | in Academic | Academic Institutions | | Centre, Tezpur |
| Dutta | Institution | | | University and |
| Dutta | | | | Gargoan College, |
| | | | | Sibasagar, Assam, |
| | | | | India (Online) |
| | University based | Prof. D. Konwar | 19-01-2022 | Tezpur University, |
| | Technology Transfer: | memorial lecture, | | Assam, India (Online) |
| | Prospects and | Department of Energy, | | |
| | Challenges | Tezpur University | | |

Awards/Honours/Notable Achievements

| Name of Awardee | Designation of Awardee | Achievement | Event/Awarded by |
|------------------|-------------------------------|------------------|------------------|
| Professional | Dr. Partha P Dutta, Professor | Nominated as | ISES: Germany |
| Honorary Member | | Professional | |
| (ISES: Germany): | | Honorary Member | |
| 2021-2022 | | (ISES: Germany): | |
| | | 2021-2022 | |

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Oualified Students | Academic Programme |
|--------------------------------|------------------------------|--------------------|
| GATE | 03 | B.Tech |

Notable Placement of Students

| Name of Student | Academic Programme | Placement Designation | Company/ Organization | Mode of Selection |
|------------------------|-----------------------|---------------------------|--------------------------|----------------------|
| Hirakjyoti Nath | B.Tech | Sr. Officer | Oil India Limited | On-campus |
| Sasankajit Dihingia | B.Tech | Sr. Officer | Oil India Limited | On-campus |
| Bitopan Das | B.Tech | Sr. Officer | Oil India Limited | On-campus |
| Srinjoy De Joardar | B.Tech | Graduate Engineer Trainee | Saint Gobain | On-campus |
| Srinjoy De Joardar | B.Tech | Graduate Engineer Trainee | Tata Technologies | On-campus |
| Mustafa Siraj | B.Tech | Graduate Engineer Trainee | Tata Technologies | On-campus |

| Barbhuiya | | | | |
|-----------------------------|--------|-----------------------------------|------------------------|-----------|
| Pranjit Baruah | B.Tech | Graduate Engineer Trainee | Tata Technologies | On-campus |
| Rishav Dutta Purkayastha | B.Tech | Graduate Engineer Trainee | Tata Technologies | On-campus |
| Vikash Ranjan | B.Tech | Graduate Engineer Trainee | Tata Technologies | On-campus |
| Satyajit Borah | B.Tech | Graduate Engineer Trainee | Tata Technologies | On-campus |
| Sasankajit Dihingia | B.Tech | Graduate Engineer Trainee | Tata Technologies | On-campus |
| Vikash Ranjan | B.Tech | Graduate Engineer Trainee | Sanmar Group | On-campus |
| Piyali Dey | M.Tech | Junior Management Grade I | Federal Bank | On-campus |
| Alankrita Priyadarshani | M.Tech | Junior Management Grade I | Federal Bank | On-campus |
| Harkha Jyoti Gogoi | B.Tech | Associate IT Consultant | ITC Infotech | On-campus |
| Bhargav Jyoti Nath | B.Tech | Project Engineer | Wipro | On-campus |
| Mustafa Siraj Barbhuiya | B.Tech | Progammer Analyst Trainee | Cognizant Technologies | On-campus |
| Arohan Neog | B.Tech | Progammer Analyst Trainee | Cognizant Technologies | On-campus |
| Hirakjyoti Nath | B.Tech | Progammer Analyst Trainee | Cognizant Technologies | On-campus |
| Aadipta Ghosh | M.Tech | Post Graduate Engineer Trainee | L&T ECC | On-campus |
| Himanku Bordoloi | M.Tech | Post Graduate Engineer Trainee | Alstom | On-campus |
| Mriganan Madhab Bordoloi | M.Tech | Post Graduate Engineer Trainee | Alstom | On-campus |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic | Name of other Institute | Enrolled |
|--------------------|--------------------------|------------------------------------|-----------|
| | Programme (in TU) | | Academic |
| | | | Programme |
| Girban Yachyas | B.Tech | RGIPT - Energy Institute Bengaluru | M.Tech |
| Abhishek Chaurasia | B.Tech | RGIPT - Energy Institute Bengaluru | M.Tech |
| Madhusmita ray | B.Tech | IIT Gandhinagar | M.Tech |
| Bonashree Gogoi | B.Tech | RGIPT - Energy Institute Bengaluru | M.Tech |
| Sucharia Mondal | B.Tech | IIM Visakhapatnam | MBA |
| Mridupavan Gogoi | M.Tech | NIT, Silchar | PhD |
| Utpal kumar Dutta | M.Tech | NIT, Silchar | PhD |

REPORT OF THE DEAN, SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

About the School

While each Department and Centre under the School pursues its designated M.A., PhD, Diploma or Certificate programme, with specific thrust areas, there are some common areas of study and research which highlight the School's shared interests and goals:

- Society and Culture
- India Studies
- Migration Studies
- Gender Studies
- Translation and Translation Studies
- Environmental Ethics Social Systems, Institutions and Movement
- Literature
- Film Studies
- Lexicography
- Ethnography

- Philosophy
- Human Rights
- Philosophy of History
- Life Writing
- Travel Writing
- Academic and Technical writing
- Communication and Media Studies
- Constitutional Law, Judicial Process
- Criminology and Criminal Law
- Soft and Life Skill

Apart from these broad areas, most of the departments address at some level issues of gender, old age, disability, community health (mental and physical), environmental issues, issues pertaining to Dalit and tribal communities through outreach programmes as well as part of academic discourse.

In keeping with the requirements of the NEP 2020 and drawing upon available resources, we are working on a four-year multidisciplinary undergraduate programme of 160 credits. Instead of specializations in a particular areas, this programme will offer an eclectic and innovative mix of outcome-oriented courses from across different subjects and disciplines to equip students for employment in more than one sector. As per the NHEQF, flexibility and choice of courses will be the key features of the programme. The larger goal is to produce well-rounded graduates with critical and contemporary skills across the arts, humanities, languages, sciences and social sciences. This will bridge the gap between academic training and social-professional skills.

| Department/Centre | Academic Programmes Offered | Student |
|-------------------|-----------------------------|----------|
| - | | Intake |
| Assamese | M.A. | 20 |
| | Ph.D | Variable |
| Cultural Studies | M.A. | 35 |
| | Ph.D | Variable |
| Education | B.Ed. | 58 |
| | Integrated B.Sc-B.Ed | |
| | M.A. | 33 |
| | PhD | Variable |
| English | Integrated M.A | 25 |
| | M.A. | 57 |
| | PhD | Variable |

Departments/Centres and Academic Programmes Offered

| Foreign Languages | Certificate course in Chinese | 39 |
|-----------------------------------|---|----------|
| Hindi | M.A. | 30 |
| | P.G. Diploma in Translation | 31 |
| | PhD | Variable |
| Law | Master of Laws | 25 |
| Linguistics | M.A. | 30 |
| | Ph.D | Variable |
| Mass Communication and Journalism | M.A. in Mass Communication and Journalism | 38 |
| | M.A. in Communication for Development | 13 |
| | Ph.D. | Variable |
| Social Work | M.A. | 22 |
| | Ph.D | Variable |
| Sociology | M.A. | 38 |
| | Ph.D | Variable |
| Centre for Inclusive Development | P.G. Diploma in Child Rights and Governance | 04 |
| Chandraprabha Saikiani Centre for | P.G. Diploma in Women Studies | 20 |
| Women Studies | Ph.D. | Variable |

Important Activities

- FDPs Conducted by (1) the Dept of English (2)Dept of Cultural Studies (3) Dept of Assamese, (4) Education
- National Seminars; as well as Webinars; Invited Lectures, in most of the Departments under the School of HSS
- Outreach Programmes by the Dept. of Cultural Studies, Dept of Social Work, Dept of Sociology, Centre for Inclusive Development, Women Studiers Centre, Dept of MCJ
- Short film production and Screening by the Dept of MCJ also NAYA SOCH (Networking and Action by Young Adults for Social Change)
- Sensitization programmes on Gender, Health and Hygiene, Substance Abuse and Mental Health, Good Academic Practices by the Dept. of Cultural Studies, Dept of Education, Dept of Social Work, Women Studiers Centre and the CID, Human Rights Awareness by the Dept of Law.
- Field Study trips to places of historical, cultural and ethnographic interest
- Celebration of special days like International Women's Day; Social Work Day; Heritage Day; Mother Language Day; Press Freedom Day; Constitution Day.

Officers and Staff Members

| Designation | Name | <email> @tezu.ernet.in</email> | Date of holding the current position |
|--|----------------------|------------------------------------|--|
| Dean, School of HSS | Farheena Danta | fdefl | 01-01-2022 |
| Office Assistant (shared with Sociology) | Amarjyoti Bharali | amar | |
| MTS | Tanka Bahadur Chetri | | |

DEPARTMENT OF ASSAMESE

About the Department

The Department of Assamese, established in 2019, is a new department. However, it may be said to have begun life as the Centre for Assamese Studies which was established in 2011. The primary aim of the Centre was to undertake and foster research in Assamese language and culture, and one of its achievements was the creation of an extensive digital archive of Assamese manuscripts, books, and important documents, from the medieval period to the modern. The present Department incorporates such existing facilities.

In view of the paucity of standard texts of the classical and canonical works of Assamese literature (for example, the works of Madhava Kandali and Sankaradeva, Madhavadeva, Rama Saraswati and others), including concordances to the major works of Assamese literature, the Department's first programme, the post-graduate degree programme in Assamese incorporates courses in textual criticism/text-critical studies and digital humanities. Textual criticism/text-critical studies and digital humanities have also been identified as the thrust areas in research.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|--------------------|---|
| M.A. in Assamese | 20 |
| Ph.D. in Assamese | Variable (No student admitted in 2021-22) |

Thrust Research Areas of the Department

- Assamese Language, Literature and Culture
- Textual criticism
- Digital Humanities
- Translation Studies
- Film Studies
- World Literature

Major Facilities/Equipment available

- Departmental Library
- Digital Archive

Faculty Members

| Designation | Name | Highest | Specialization | <email></email> | Date of |
|-------------|--------------|---------------|---------------------------|-----------------|-------------|
| | | Qualification | | @tezu.ernet.in | holding the |
| | | (Institute) | | | current |
| | | | | | position |
| | Subrat Jyoti | Ph.D. | Assamese Literature, Film | subrat | 13-02-2020 |
| Associate | Neog | (Gauhati | Studies, Theatre Studies, | | |
| Professor | | University) | Stylistics, Creative | | |
| Frojessor | | | Writing (Play and | | |
| | | | Screenwriting) | | |
| | Juri Dutta | Ph.D. (Rajiv | Regional Literatures, | juri | 6-09-2016 |
| Assistant | | Gandhi | Comparative Literature | | |
| Professor | | University) | and Translation, Creative | | |
| | | | Writing | | |

| | Sanjib | Ph.D. | Study of Assamese | sanjibd | 20-02-2020 |
|---------|------------|--------------|--------------------------|---------|------------|
| | Deka | (Gauhati | Language, Medieval | | |
| | | University) | Assamese Language, | | |
| | | | Assamese Morphology, | | |
| | | | Nineteenth Century | | |
| | | | Assam, Printing History, | | |
| | | | Creative Writing | | |
| | Jyotishman | M.Phil. | Modern Assam Literature, | jyotish | 24-02-2020 |
| | Das | (Dibrugarh | Assamese Novel, | | |
| | | University) | Assamese Mass Media, | | |
| | | | Creative Writing, Life | | |
| | | | Writing, Travel Writing | | |
| | Sushanta | M.A. (Tezpur | Assamese Morphology, | | 01-03-2022 |
| | Rajkhowa | University) | Syntax-Semantics | | |
| Guest | | | Interface | | |
| Faculty | Parthajit | M.Tech. | Machine Learning and | | 01-03-2022 |
| | Bora | (Tezpur | Data Security | | |
| | | University) | | | |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the current position |
|-----------------|-------------------|-------------------------------|---|
| Technical Staff | Chandrasekhar Roy | chaser | 21-10-2019 |
| MTS | Malati Boro | | 08-02-1996 |

Research Projects (both Ongoing and New)

| Project Title | Funding Agency | Amount (in INR) | Duration | Investigator(s) |
|------------------------|-----------------------------------|--------------------|------------------------------------|----------------------|
| Film Maker Manju Borah | National Film Archive of India | 30000 | 6 months Feb. 2022 to Aug. 2022 | Subrat Jyoti Neog |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Das, J. (2022). Aalocanir Braman Sahitya: Upekhyita Ekhan Alocani aro Upekhyita Eti Sahitya Bidha(Travel-writing in Alocani), *Gariyoshi*, XXIX(5): 46-50.
- Das, J. (2022). Homen Borgohainr Kishor-Sahitya, Satsori, 17(10): 46-49.
- Deka, S. (2022). Kahini-Kathan, Bhim-Charit aru Oupanibeshik Asam : Pathanar Ek Itihas, Part I, *Satsori*, 17(8): 44-48.
- Deka, S. (2022). Kahini-Kathan, Bhim-Charit aru Oupanibeshik Asam : Pathanar Ek Itihas, Part II, *Satsari*, 17(10): 70-75.
- Dutta, J. (2022). Asamiya Upanyasat Queer Cetana (Queer Consciousness in Assamese Novels). Satsari, 17(6): 47-51
- Neog, Subrat Jyoti (2021). Sapon Jyoti Thakur's Plays. *Gariyoshi*, xxviii(7): 80-82
- Neog, Subrat Jyoti (2021). Abinash Sarma's Plays. Gariyoshi, xxviii(10): 57-61
- Neog, Subrat Jyoti (2021). Black and White-A Symbolic Play. Satsari, 16(7): 98-100
- Neog, Subrat Jyoti (2021). Abinash Sarma's directorial venture Aahar. Satsari, 17(4):100-108
- Neog, Subrat Jyoti (2022). Indian Panorama 2021. Gariyoshi, xxix(4): 53-55

• Neog, Subrat Jyoti (2022). Mukti and Tare Zameen Par: An Intertextual Study. *Anvesan*, xiv(14): 143-148

Publication of Book Chapters

• Das, J. (2021) Asamiya Bhrman Sahityar Samikshatmak Itibritta (A study of Assamese travel literature) In Pallavi Deka Bujarbarua, editors, *Tulanamulak Sahitya aru Paridhiya kshetra*, pages 282-294. AASU.

Publication of Articles in Other Forms

- Das, J. (2021). Pariparcha Samalocanar Alokat Anuradha Sarma Pujarir Upanyas Eyat Ekhan Aranya Achil. *Anviksha*, VI: 85-93.
- Das, J. Tokyor Abarjana aro Abarjana Mukta Bharatar Swapna (Waste Management of Tokyo City), *Anyayug*, February, 2022.
- Dutta, J. Translated 'Basanar Aita' (a short story titled 'Basan's Grandmother' by Bimal Sinha and translated into English by Banamali Goswami) into Assamese in *Prakash* (ISSN 2279-0683), Third Phase: February, 2022. Pp 64-69
- Dutta, J. Translated 'Siror Babe Ejopa Laburnam' (a short story titled Laburnum for my Head by Temsula Ao) from English into Assamese in *Satsori* (ISSN 2319-8893), Vol 16, Issue No 08. March, 2021. Pp 111-119
- Dutta, J. Translated 'Erati' (a Manipuri short story titled One Night by Keisham Priyokumar and translated into English by Robin S. Ngangom) into Assamese in *Gariyoshi* (ISSN 2349-5324), Vol. XXVIII, Issue No. 11. September, 2021. Pp 83-85
- Dutta, J. "Bihu: Aitijya's Punaruddhar, Atmaparichayar Cetana aru Bicchinna Paripachik" (Bihu: Revival of Heritage, Identity Consciousness and Detached Context) in *Gariyoshi*, (ISSN 2349-5324) Vol. XXIX, Issue No. 6. April, 2022. Pp 3-8
- Dutta, J. "Sylvia Plath: Jiwan, Shristi, Hepah aru Mrityusetana (Sylvia Plath: Life, Creations, Desires and Death Consciousness)" in *Prakash* (ISSN 2279-0683), Third Phase: August, 2021. Pp 49-56
- Dutta, J. "Queer Tatta (Queer Theory)" in *Critical Epistemology*, May-August, 2021. Vol 1, Issue II, Page. 11-24
- Dutta, J. a short story "Seito Kar Ghor" (Whose House is That)" in *Prantik (ISSN 0971-5932)* edited and published by Pradip Barua (1-15 July, 2021) Third Phase: Vol. XL, No 15, Pp 55-58
- Neog, S.J. Santawana Bordoloi's Film, E-Cine India, July-Sept. 2021
- Neog, S.J. Celluloid Feast, *The Assam Tribune*, December 19, 2021
- Neog, S.J. Lambodar Bora: An Introduction, Samalocanatmok Jnancarca, September-December, 2021

| Name of Faculty/ Staff Member | Purpose of Attending | Title of Event | Date/Period | Organizer and Venue |
|--|-------------------------|--|--------------------------------|--|
| Juri Dutta | Participant | Interdisciplinary Refresher Course on Curriculum and Pedagogy | 07-06-2021 to 21-06-2021 | Teaching Learning Centre, Tezpur University (Offline) |
| | Language Expert | Preparation of Trilingual Glossary of Engineering in Assamese Language | 27-12-2021 to 31-12-2021 | Commission for Scientific and Technical Technology, Ministry of Education, Govt of India, Tezpur University |

Conference/Workshop/Symposium/Seminar etc. Attended

| | | | | (Offline) |
|--------------|---------------|---------------------------|-------------|--|
| | Language | Preparation of Trilingual | 31-01-2022 | Commission for Scientific |
| | Expert | Glossary of Engineering | to | and Technical Technology, |
| | Expert | in Assamese Language | 04-02 2022. | Ministry of Education, Govt |
| | | III Assamese Language | 04-02 2022. | of India, Tezpur University |
| | | | | (Offline) |
| | Language | Preparation of Trilingual | 28-02-2022 | Commission for Scientific |
| | Expert | Glossary of Engineering | to | and Technical Technology, |
| | | in Assamese Language | 04-03-2022 | Ministry of Education, Govt of India, Tezpur University |
| | | | | (Offline) |
| Jyotishman | Participation | Induction/Orientation | 18-05-2021 | Teaching Learning Centre, |
| Das | | Programme | to | Ramanujan College, |
| | | | 17-06-2021 | University of Delhi |
| | | | | (Online) |
| | Participation | FDP on Issues of | 12-06-2021 | Teaching Learning Centre |
| | _ | Exclusion in Assamese | to | and Assamese Department, |
| | | Literature | 16-062021 | Tezpur University (Online) |
| | Paper | National Seminar on | 11-04-2022 | North Lakhimpur College |
| | Presentation | Life and Works of | | and St. Pauls' Cathedral |
| | | Padmanath | | Mission College and Asam |
| | | Gohainborooah, | | Sahitya Sabha (Offline) |
| | | Hemchandra Goswami | | |
| | | and Panindranath Gogoi | | |
| | Participation | Induction/Orientation | 18-05-2021 | Teaching Learning Centre, |
| | _ | Programme | to | Ramanujan College, |
| | | _ | 17-06-2021. | University of Delhi(Online) |
| | Participation | FDP on Issues of | 12-06-2021 | Teaching Learning Centre |
| | _ | Exclusion in Assamese | to | and Assamese Department, |
| | | Literature | 16-062021 | Tezpur University(Online) |
| | Paper | National Seminar on | 11-04-2022 | North Lakhimpur College |
| | Presentation | Life and Works of | | and St. Pauls' Cathedral |
| | | Padmanath | | Mission College and Asam |
| | | Gohainborooah, | | Sahitya Sabha (Offline) |
| | | Hemchandra Goswami | | |
| | | and Panindranath Gogoi | | |
| | Language | Preparation of Trilingual | 31-01-2022 | Commission for Scientific |
| | Expert | Glossary of Engineering | to | and Technical Technology, |
| | | in Assamese Language | 04-02 2022. | Ministry of Education, Govt |
| | | | | of India, Tezpur University (Offline) |
| | Language | Preparation of Trilingual | 28-02-2022 | Commission for Scientific |
| | Expert | Glossary of Engineering | to | and Technical Technology, |
| | | in Assamese Language | 04-03-2022 | Ministry of Education, Govt |
| | | | 04 05 2022 | of India, Tezpur University |
| Sonjih Dalra | Dagourac | Dading Madiaval | 00 12 2021 | (Offline) Sri Sri Aniruddhadeva Chair, |
| Sanjib Deka | | Reading Medieval | 09-12-2021 | |
| | Person | Manuscript | to | Department of History, |
| | | | 12-12-2021 | Dibrugarh University (Offline) |
| | Language | Preparation of Trilingual | 27-12-2021 | Commission for Scientific |
| L | Language | | 27-12-2021 | |

| | Expert | Glossary of Engineering | to | and Technical Technology, |
|------------|---------------|---------------------------|-------------|------------------------------|
| | I · · | in Assamese Language | 31-12-2021 | Ministry of Education, Govt. |
| | | 6 | | of India, Tezpur University |
| | | | | (Offline) |
| | Language | Preparation of Trilingual | 31-01-2022 | Commission for Scientific |
| | Expert | Glossary of Engineering | to | and Technical Technology, |
| | - | in Assamese Language | 04-02-2022. | Ministry of Education, Govt. |
| | | | | of India, Tezpur University |
| | | | | (Offline) |
| | Resource | One Day Workshop on | 15-03-2022 | Dept. of Cultural Studies, |
| | Person | Manuscript Painting: | | Tezpur University |
| | | Tradition of Assam | | (Offline) |
| Subrat | Paper | National Seminar on | 07-06-2021 | North Lakhimpur College. |
| Jyoti Neog | presentation. | Homen Borgohain's life, | | (Online). |
| | | literature and | | |
| | | philosophy. | | |
| | Paper | Seminar on Language | 08-06- 2021 | Dibru College (Online) |
| | presentation. | Family | | |
| | Paper | Seminar on Bishnu | 20-06-2021 | HCDG College. (Online). |
| | presentation. | Rabha and Humanism | | |
| | Paper | Seminar on The | 22-06-2021 | HCDG College. (Online) |
| | presentation | Language of | | |
| | | Advertisement | | |
| | Paper | Seminar on Theatre and | 03-08-2021 | CKB College. (Online). |
| | presentation | Mass Media | | |
| | Paper | Film as Mass Media | 23-06-2021 | Sibasagar Girls College. |
| | presentation | | | (Online). |
| | Paper | International Conference | 22-02-2022. | Digital Humanities Alliance |
| | presentation | DHARTI 2022 on The | | for Research and Teaching |
| | | Digital Divides: | | Innovations. (Online) |
| | | Discontents, Debates and | | |
| | | Discussions | | |

Invited Talk

| Name of | Title of the Talk | Title of the | Date | Organizer and |
|------------|-------------------------------|-----------------|------------|--------------------|
| Faculty | | Event | | Venue |
| Member | | | | |
| Jyotishman | Asamiya Upanyasat | Online Lecture | 07-06-2021 | Sapatgram College, |
| Das | Pariparshik Sajagata Prasanga | | | Assam |
| | (Ecological Consciousness in | | | |
| | Assamese Novel), | | | |
| | Background of Romantic | Online Lecture | 04-08-2021 | Department of |
| | Literature | | | Assamese, North |
| | | | | Lakhimpur College |
| | | | | (Autonomous) |
| | Contemporary Assamese | Seminar on | 20-09-2021 | Saijum-The Group |
| | Short-story | "Contemporary | | of Study, Bodoland |
| | | Assamese | | University |
| | | Literature" | | |
| | The Art of Essay Writing | Online Literary | 16-01-2022 | Damdama College, |
| | | Workshop | <u> </u> | Kamrup |

| Sanjib Deka | Galpa Likhar Kausal Kenekoi | Online Lecture | 15-06-2021 | Dhemaji College |
|-------------|-----------------------------|----------------|-------------|----------------------|
| U U | Ayatva Kariba Pari | | | Students' Union, |
| | | | | Dhemaji College. |
| | | | | Online |
| | Asamiya Sahityar Itihas: | Online Lecture | 27-06-2021 | Department of |
| | Pathan aru Punarpathan | | | Assamese, Khowang |
| | | | | College, Dibrugarh |
| | Asamiya Bhasar Itihasar | Online Lecture | 04-07-2021 | Asamiya Club, |
| | Ketbor Dis: Nirman aru | | | Tezpur |
| | Binirman | | | |
| Subrat | Jyotiprasad, Joymoti, | Invited Talk | 29 -12-2021 | Karntikal Prakashan, |
| Jyoti Neog | Indramalati and Beyond | | | Nagaon. |
| | Trends of Assamese short | Invite Talk | 27-03-2022 | Sirantan Sahitya, |
| | story | | | Guwahati. |
| | Playwright Jyotiprasad | Radio Talk | 16-01-2022 | All India |
| | | | | Radio,Naagaon |
| | Fiction Series in TV: | Invited Talk | 20-03-2022 | Rang Channel, |
| | Challenges and Prospect | | | Guwahati |

Awards/Honours/Notable Achievements

| Name of | Designation of Awardee | Achievement | Event/Awarded by |
|------------|------------------------|---------------------------|------------------------------|
| Awardee | | | |
| Subrat | Faculty Member | Jury member of the Indian | Ministry of Information and |
| Jyoti Neog | | panorama-2021 | Broadcasting, Govt. of India |

Other Significant Activities of the Department

- Webinar: "Homen Borgohain's Literature", 25-05-2021
- Online Faculty Development Programme (FDP): on "Issues of Exclusion in Assamese Literature", 12-07-2021 to 16-07-2021
- Celebration: Third Foundation Day Celebration of Department of Assamese, Tezpur University, 1-07-2021.
- Observation: Observance of Sankaradeva Tithi, 8-09-2021
- Workshop: A Weeklong Workshop on "Assamese Manuscript Reading and Textual Criticism", 25-10-2021 to 31-10-2021
- Inaugural Ceremony of Departmental magazine "Kixalaya", 12-11-2021
- Distinguished Lecture Series: Under the umbrella of "Azadi Ka Amrit Mahotsav", 7-09-2021, 6-11-2021 and 16-11-2021
- Workshop: "Teaching and Research Aptitude", 23-11-2021
- An extension activity to preserve Sanchipat Manuscript at two satras of Tezpur locality namely Nikamul and Baralimara from 29-11-2021 to 31-11-2021
- Awareness and Sensitization Program on GOOD ACADEMIC RESEARCH PRACTICES, 05-12-2021 to 06-12-2021
- Extension Activitiy in collaboration with Asam Sahitya Sabha on the occasion of 150th birth anniversary celebration of Padmanath Gohain Baruah at Asamiya Bhasa Unnati Sadhini Sabha Prangan, Kalibari, Tezpur. 15-12-2021.
- Workshop: "Reading Sancibark Manuscript and Conservation" at Nikamul Satra Premise 25-12-2021 to 27-12-2021.

- Online Lecture Series: Speakers: Prof. Prakash Pattanayak, Delhi University, Bhaskar Hazarika, Eminent Film Maker; Dr. Kalpana Sarma Kalita, Cotton University, Prof Subha Satyanath, Delhi University, 06-09-202 to 07-12-2021
- A weeklong Lecture Series: "Digital Humanities" by Dr. Koel Mitra, 1-02-2022 to 07-02-2022.
- Observance of International Mother Language Day, 21-02-2022.
- Symposium: "Assamese Music and Cinema", 21-03-2022 & 22-03-2022.
- Performance of "Ekanta Enisha" an Assamese Play by Abinash Sarma, 27-04-2022.
- Talk on "Growth and Development of Assamese Novel" by Prof. Gobindra Prasad Sarma, Rtd. Professor, Gauhati University, 11-04-2022 & 12-04-2022.

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|--------------------|
| NET | 03 | MA |

DEPARTMENT OF CULTURAL STUDIES

About the Department

The Department of Cultural Studies, Tezpur University, is one of the earliest Departments in the country to be devoted to the pursuit of cultural studies. Founded in 1995, the department engages with cultural products, practices and forms with a special focus on North-East India. Its curricula focus on interdisciplinary approaches to traditional fields of study where the aim is to explore emergent cultural and cross-cultural phenomena from multiple points of view. Researchers and faculties, drawn from various disciplines like Anthropology, Performance Studies, Literature, Folklore, Media and Film, Gender Studies are actively engaged in exploring subjects like cultural history, folklore and culture, local and national media, heritage, gender, cultural theory, comparative literature, translation, and formation of nationalisms.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|------------------------|-----------------------------------|
| MA in Cultural Studies | 35 |
| Ph.D. | Variable (02 admitted in 2021-22) |

Thrust Research Areas of the Department

- Cultural History
- Media and Popular Culture
- Cultures of North-East India

Major Facilities/Equipment available

- Facilities:
 - Departmental museum
 - Departmental library
 - Digital archive of cultural contents
 - Audio-visual classroom cum seminar hall with projector
 - Wall of Heroes: A photo gallery of Indian freedom fighters
- Equipment:
 - NAS server
 - Workstations for audio-visual processing
 - DSLR cameras and video camcorders

Faculty Members

| Designation | Name | Highest | Specialization | <email></email> | Date of |
|-------------|-----------------|---------------|------------------------|-----------------|-------------|
| | | Qualification | | @tezu.ernet.in | holding the |
| | | (Institute) | | | current |
| | | | | | position |
| | Debarshi Prasad | Ph.D. | Cultural Theory and | dpnath | 22-10-2014 |
| | Nath | (Rajiv | Contemporary Culture & | | |
| | | Gandhi | Films, Comparative | | |
| Professor | | University) | Literature and | | |
| | | | Translation, Cultural | | |
| | | | Memory and Cultures of | | |
| | | | Northeast India | | |
| Associate | Parasmoni | Ph.D. | Oral history, Digital | paras | 18-11-2019 |

| Professor | Dutta | (TU) | culture, Heritage studies | | |
|-----------|----------------|----------------|---------------------------|-----------|------------|
| | | | and Cinema & | | |
| | | | advertisements | | |
| | Madhurima | Ph.D. | Performance Studies, | mgs | 04-04-2014 |
| | Goswami | (TU) | Women Studies and | | |
| | | | Indian Poetics | | |
| | Juri Gogoi | Ph.D. | Anthropology of Textile, | jgkon | 03-11-2009 |
| | Konwar | (Dibrugarh | Anthropology of Food, | | |
| | | University) | Ethnicity and Medical | | |
| | | | Anthropology | | |
| | Jayanta | Ph.D. | Media & Culture, | jvdas | 16-11-2009 |
| | Vishnu Das | (TU) | Comparative Media | | |
| | | | Studies and Media and | | |
| | | | Globalization | | |
| Assistant | Mandakini | Ph.D. | Gender Studies, Folklore | mb | 13-10-2010 |
| Professor | Baruah | (TU) | Studies, Television | | |
| | | | Studies and Paremiology | | |
| | Hashik | Ph.D. | Performance studies, | hashikk | 17-09-2012 |
| | Nadukkandiyil | (Hyderabad | Community studies and | | |
| | | University) | Cultural history | | |
| | Moushumi | Ph.D. | Visual art and culture | moushumi | 03-04-2017 |
| | Kandali | (MS | | | |
| | | University, | | | |
| | | Baroda) | | | |
| Adjunct | Alison East | MPhEd | Dance Ethnography | alieast41 | 23-11-2021 |
| Faculty | | (University of | | | |
| | | Otago) | ~ | | |
| | Barbara Hellen | Ph.D. | Community Dance | b.snook | 23-11-2021 |
| | Snook | (University of | | | |
| | | Auckland) | | | |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the current |
|-------------------|------------------|-------------------------------|-----------------------------|
| | | | position |
| Assistant | Suren Baruah | suren | 01-05-2013 |
| Assistant Curator | Mrs. Subhra Devi | sd | 08-04-2011 |
| MTS | Luhit Bhuyan | | 01-10-1995 |

Research Projects (both Ongoing and New)

| Project Title | Funding | Amount | Duration | Investigator(s) |
|--|---------|------------|---------------|-----------------|
| | Agency | (in INR) | | |
| SAP-DRS II: Sacred Spaces on the Banks of | UGC | 76 lakh | 5 years | Debarshi Prasad |
| the River Brahmaputra | | | (2018-23) | Nath |
| Archiving, Modeling and Visualization of the | DST | 47.17 lakh | 3 years | Parasmoni |
| Eco-Cultural Heritage of Majuli River Island | | | (2019-2022) | Dutta |
| of Assam | | | Extended till | |
| | | | 2023 | |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

• Wanlaya, N. and Gogoi Konwar, J. (2021) Poi Sanglong/Poi Khamsang : The Study of Rite of Passage in Tai man's life in Tai Yai Community of Ban Pangmoo Village, Maehongson,

Thailand and Tai Aiton Community of Banlung Mantai , Karbi Anglong District, Assam, India. *Turkish Journal of Computer and Mathematics Education*. 12(8): 2564-2575.

- Ngutoli Y Swe and Gogoi Konwar, J. (2021). Degeneration of 'Memory': the case of Sumi Naga. *Journal of the Indian Anthropological Society*. 56(2): 138-153.
- Hazarika, P. and Nath, D.P. (2022) 'Understanding Cultural Nationalism in Assam: Perspectives from the Plays of Jyotiprasad Agarwala and Bishnuprasad Rava' in Rupkatha Journal on Interdisciplinary Studies in Humanities (Scopus Indexed) 14(2).
- Sarmah, P. and Nath, D.P. (2022) 'Oti axamiyagiri: Assamese nationalistic masculine identity, United Liberation Front of Asom and cyberspace'. *Ethnicities, A Sage Publication*. 1–17.
- Gogoi Konwar J. and Konwar B. K. (2021) Xu Xamparkar Birol Namuna Moglou Rajkumari aru Asomor Borkunwari Kuranganayani (Part 2). *Gariyoshi*. XXVIII (7): 44-47.
- Phukan, B.J. and Gogoi Konwar J. (2021) An Understanding of Slogans- the Rhetoric of the Assam Movement (1979-1985). *Journal of the Indian Anthropological Society*. 56:25-40.
- Kandali, M. (2021) 'Silpi Shibha BrahmarKalachetanat Naari'. *Gariyoshi*. 37 (11): 42-45.
- Kandali, M. 'Lokokalar Sugandhi aru Kavi Nilomoni Phukanar Lokokalpadristi'. *Gariyoshi*. 39 (11): 42-45.
- Kandali, M. 'Pratham Shriti , Satsori. 34 (1): 127-129.
- Hashik, N.K. (2021) Migration, Films and Muslims of Kerala: Between Host and Home. *Ishal Paithrkam.* 25:47-74.
- Baruah, M. 2022. "Menarche Rituals for Constructing Feminine Identity: Observing Nowai Tolani Biya, the Menarche Rituals of Assam". Dilip Kumar Kalita (ed.) Anandam Journal of Anundoram Borooah Institute of Language, Art and Culture, Assam. 11.
- Gogoi, M. and Baruah, M. 2020-21. "Food as a Gendered Text: An Analysis from Visual Media." Srotaswini. V: 138-144.

Publication of Books

• Kandali, M. (2022) *The Black magic Women, a collection of short fiction*, Penguin Random House India, (A VINTAGE imprint in the USA, Canada, UK, Ireland, Australia, New Zealand ,India , South Africa, China).

Publication of Book-chapters

- Gogoi Konwar, J. (2021). Sanctum Sanctorum, Art and Chaklong: Retelling the Story of a Tai-Ahom Ceremony. In *Art Design and Society: Global Perspective*. Pandey A. and Kumari S., editors, pages 70-76. Macmillan Education, New Delhi.
- Dutta, P. (2021). Questions around Ram Vijay: Sattriya in a Monastic Tradition. In *Performing the Ramayana Tradition: Enactments, Interpretations, and Arguments.* Richman P. and Bharucha, R. New York: Oxford University Press.
- Nath, D.P. (2022). Myth: Its Uses and Abuses. In *Myth and Tales of Koch-Rajbangshis of Western Assam.* Ed. Nath Bhakat, D. Sahitya Akademi, New Delhi.
- Dowerah, S. and Nath, D.P. (2021). Memory, Homeland and the Search for the 'Native' in Bokul. Narrative Cultures of North East India: Traditions, Texts and Representations. Ara, A. Sharma, D. Gogoi, B.J. and Sen, S. Pencraft International, New Delhi.
- Baruah, M. (2022). "Asomiya Prabad aru Nari". Binapani Devi Kataki (Ed.) Sanskriti Bikhyan. Jorhat: J.B. College. 259-264. ISBN: 978-81-929622-9-0.
- Nath, D.P. (2022). Translated the short story 'Retirement' in the anthology titled *A Solitary Place* (*stories by Ajanta*) Bedakantha Publishers, Jorhat.

Publication of Policy Documents

• Nath, D.P., Thakur S., Snook B., Das J.V., Goswami K.J., Duwarah J. and Pegu, D. (2021). *Training Module titled Folklore for Adolescent Empowerment and Social Change*. A Collaborative Venture by the Department of Cultural Studies, Tezpur University, Samagra Shiksha, Assam and UNICEF Assam.

| | 1 0 1 | | | |
|----------------|-------------------|-------------------------|--------------------|-------------------------------|
| Name of | Purpose of | Title of Event | Date/Period | Organizer and Venue |
| Faculty/ Staff | Attending | | | |
| Member | | | | |
| Debarshi | Chaired a | National Seminar on | 21-01-2022 | Centre for North East Studies |
| Prasad Nath | session | 'Folklore, Folklife and | to | and Policy Research of Jamia |
| | | Cultural Memory' | 25-01-2022 | Millia Islamia, New Delhi. |

Conference/Workshop/Symposium/Seminar etc. Attended

Invited Talk

| Name of | Title of the | Title of the Event | Date | Organizer and Venue |
|----------|---------------|----------------------|------------|---|
| Faculty | Talk | | | |
| Member | | | | |
| Debarshi | Charting a | 2nd International e- | 22.10.2021 | New Literaria - An International |
| Prasad | New Course | Conference on | to | Journal of Interdisciplinary Studies in |
| Nath | for Cultural | 'Contemporary | 24.10.2021 | Humanities. In collaboration with |
| | Studies in | Trends and | | Department of History, Humanities |
| | India: | Development in | | and Society, University of Rome Tor |
| | Speaking from | Cultural Studies and | | Vergata, Italy & Department of |
| | the Margin | the Humanities' | | English, Guru Ghasidas |
| | | | | Vishwavidyalaya, Bilaspur, India |
| | Cultural | National Webinar on | 27-09-2021 | Mudhoji College (affiliated to Shivaji |
| | Studies as a | 'Cultural Studies: A | | University, Maharashtra), Phaltan, |
| | New Approach | New Approach to | | Maharashtra |
| | | Explore Cultures, | | |
| | | Cultural Texts and | | |
| | | Artifacts' | | |

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|------------------------|
| JRF | 01 | MA in Cultural Studies |

Notable Placement of Students

| Name of | Academic | | Placement | Company/ Organization | Mode of |
|-----------------------|-----------------|---------|-----------------------------------|---|-----------|
| Student | Programme | | Designation | | Selection |
| Rituparna | MA and Ph | nD in | Research | Dr APJ Abdul Kalam Centre for Policy | Off- |
| Hazarika | Cultural Studie | es | Associate | Research and Analysis, Indian Institute | Campus |
| | | | | of Management Shillong | |
| Liza | MA in C | ultural | Assistant | Federation of Indian FPOs and | Off- |
| Bhattacharyya Studies | | Manager | Aggregators (wholly subsidiary of | Campus | |
| | | | | NAFED), New Delhi | |
| Krishna | MA in C | ultural | Estate | Thengal Cultural Centre and Museum, | Off- |
| Kumar Saikia | Studies | | Manager | Titabar | Campus |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic Programme | Name of other Institute | Enrolled Academic Programme |
|--------------------|------------------------|-------------------------|-----------------------------|
| Simpi Phukan | MA in Cultural Studies | Bodoland University | Ph.D. in English |

DEPARTMENT OF EDUCATION

About the Department

The Department of Education, Tezpur University, was established in the year 2014 with an aim to prepare learners for meaningful careers in the field of education. Teacher Education Program assists students in developing knowledge, skills, and dispositions necessary to become effective and caring teachers in an ever-changing society. Currently, the department of education runs four programmes. MA in Education which provides learners with a more comprehensive understanding of education as a field of knowledge, Two Year B.Ed. programme, which prepares students to work as teachers in schools, Integrated B.Ed. with B.Sc./B.A. and Ph.D. in education.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|-----------------------------------|---|
| 2 Year B.Ed. | 50 |
| Integrated B.Ed. with B.Sc./ B.A. | 50 |
| M.A. in Education | 35 |
| Ph.D. (Education) | Variable (no student admitted in 2021-22) |

Thrust Research Areas of the Department

- Curriculum and Pedagogical studies for School Education
- Teacher Education
- Contemporary Educational issues in North East India
- ICT in Education

Major Facilities/Equipment available

- Psychology Resource Centre
- Art and Craft Resource Centre
- Curriculum Laboratory
- ICT Resource Centre
- Departmental Library

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------------|--------------------|---|--|------------------------------------|--|
| Professor | Nil Ratan Roy | Ph.D. (Assam University) | Curriculum Development, Educational Planning and Administration, Teacher Education, Education for Disadvantaged groups, Measurement and Evaluation | niledn | 31-08-2016 |
| Assistant Professor | Yeasmin Sultana | Ph.D. (Assam University) | Language Education, Educational Technology, Research Methodology in Education | yeasmin | 11-09-2014 |

| R. D. | Ph.D. | Mathematics Education, | padma | 15-09-2014 |
|-------------|----------------|--|---|------------|
| Padmavathy | (Pondicherry) | Research Methodology & | | |
| | | Statistics in Education, | | |
| | | Educational Psychology, | | |
| | | Cognitive Science, | | |
| | | Educational Technology, | | |
| | | e-content Development, | | |
| | | Guidance and Counseling, Environmental Education, | | |
| | | Adult and Continuing | | |
| | | Education. | | |
| Hitesh | Ph.D. | Educational Psychology, | hitesh | 16-09-2014 |
| Sharma | (DAVV, | ICT in Education, | meesn | 10 07 2011 |
| ~ | Indore) | Research Methodology | | |
| | | and SPSS, Educational | | |
| | | Administration, Guidance | | |
| | | and Counseling, Method | | |
| | | of Teaching Physical | | |
| | | sciences, Method Of | | |
| | | Teaching Biological | | |
| | | sciences, Early Childhood | | |
| | | Education | | |
| Sashapra | Ph.D. | Educational Psychology, | sashapra | 23-09-2014 |
| Chakrawarty | (BHU) | Educational Research, | | |
| | | Special Needs Education, | | |
| | | Method of Teaching in | | |
| | | Biological Science/Elementary | | |
| | | Education. | | |
| Pratima | Ph.D. | Pedagogy of Social | pratima | 23-9-2014 |
| Pallai | (University of | Science, ICT in | practina | |
| | Lucknow) | Education, Teacher | | |
| | , | Education Measurement | | |
| | | and Evaluation | | |
| Md. Asif | M.A. (AMU), | Contemporary Indian | mdasif | 20-07-2016 |
| | M.Ed. (Jamia | Education, Teacher | | |
| | Millia | Education, Educational | | |
| | Islamia) | Technology, Pedagogy of | | |
| ~ ~ ~ | | Social Science | | |
| Sradhanjali | Ph.D. (Utkal | Pedagogy of Physical | sradha | 25-07-2016 |
| Pradhan | University) | Science, Educational | | |
| | | Technology and ICT in | | |
| | | Education, Measurement and Evaluation | | |
| Rajinder | Ph.D. (Panjab | Educational Technology, | badotra | 03-08-2016 |
| Singh | University) | Teacher Education, | Dauotra | 03-08-2010 |
| Singh | Oniversity) | Language Education | | |
| Sanghamitra | Ph.D. | Gender and Education | Sdas19 | 20-11-2019 |
| Das | (NIEPA, New | | ~ | |
| | Delhi) | | | |
| | Ph.D. (R.I.E. | Science Education, | drgrana | 25-11-2019 |

| | | Ajmer, | Learning & Teaching, | | |
|---------|-------------|--------------|---------------------------|----------|------------|
| | | NCERT/ | Guidance & | | |
| | | MDSU, | Counselling/Constructivis | | |
| | | Ajmer) | m & Thinking Skills | | |
| | Jaya Yadav | Ph.D. | Teacher Education | jytuedu | 05-01-2021 |
| | | (Kurukshetra | | | |
| | | University) | | | |
| | Sweety | Ph.D. (EFLU, | Teacher Education | sweetyl | 05-01-2021 |
| | Lakra | Hyderabad. | | | |
| | V.R. Rajesh | Ph.D. (Tamil | Teacher Education | rajeshvr | 23-09-2021 |
| | | Nadu Teacher | | | |
| | | Education | | | |
| | | University) | | | |
| Guest | Soumyabrata | M.Phil | Teacher Education | Smbrt94 | 07-01-2021 |
| Faculty | Mahapatra | (Ravenshaw | | | |
| | | University, | | | |
| | | Cuttack) | | | |
| | Bandita Das | M.Ed. | Teacher Education | bandita | 24-09-2021 |
| | | (Gauhati | | | |
| | | University) | | | |
| | Reeju | M.Ed. | Teacher Education | reejub9 | 27-09-2021 |
| | Bargayary | (Pondicherry | | - | |
| | | University) | | | |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the |
|-------------------------------|-----------------|-------------------------------|---------------------|
| | | | current position |
| Technical Assistant | Amarnath Sah | amarsah | 30-08-2019 |
| Laboratory Assistant | Nilakshi Saikia | nilakshi | 22-08-2019 |
| Library Attendant | Chandan Nath | nathchn | 04-03-2020 |
| Laboratory Attendant | Anupam Saikia | anupams | 12-03-2020 |
| Office Assistant (Outsourced) | Suman Handique | sumanh | 09-06-2020 |
| MTS | Nitai Bauri | nitai12 | 01-01-1995 |

Research Projects (both Ongoing and New)

| Project Title | Funding | Amount | Duration | Investigator(s) |
|---|-----------|-----------|----------|-----------------|
| | Agency | (in INR) | | |
| Substance abuse and suicidal behavior among | ICMR, New | 28,24,500 | 12 | Nil Ratan Roy |
| college students in Northeast India | Delhi | | Months | (Co-PI) |
| National Cadet Corps as an Open Elective Credit | ICSSR, | 3.48 | 12 | Hitesh Sharma |
| Course in the Universities within the Framework | New Delhi | Lakhs | Months | |
| of NEP 2020 | | | | |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Das, S.S. and Roy, N.R. (2021). Study on Parental Involvement in Educational Development of the Children of Tea Garden Labourers in Assam. *The Journal of Oriental Research Madras*: 116-125.
- Sutradhar, S & Roy N.R (2021). A Study on the Significance and Importance of Spiritual Intelligence in Education. *Kala Sarovar* 24(3):134-140.

- Sutradhar, S & Roy N.R. (2021). A Study on Gandhian Philosophy in the Context of Spirituality and its significance in Education. *AADHUNIK SAHITYA' A quarterly bilingual (Hindi & English) Journal of Literature, Culture Modern Thinking*, 38: 169-176.
- Sutradhar, S & Roy N.R (2021). Spiritual Intelligence in the realm of Education: A Study on General Review. *Aalochan Drishti*, 22: 174-177.
- Saikia, H. & Roy, N. R (2021). Pre-Primary Schools are the stepping stone for sustainable School Education: An Investigation. *Education India: A Quarterly Refereed Journal of Dialogues on Education*, 10(2): 436-449.
- Das, P & Roy, N.R (2021). Construction of Student Engagement Scale for Activity Based Teaching-Learning Approach. *Education India: A Quarterly Refereed Journal of Dialogues on Education*, 10(4): 35-39.
- Padmavathy, R.D. (2021). Preservice Teacher trainee's attitudes towards E learning and satisfaction factors prior and during Covid- 19: A Comparative Study. *Turkish Online Journal of Qualitative Inquiry*, 12(8): 890-908.
- Padmavathy, R.D. (2021). Influence of Education Levels, Technical Abilities and Students' Satisfaction on dimensions of E-Learning attitude among University Students, *Indian Journal of Natural Sciences*, 12(67): 32814- 32827.
- Padmavathy, R.D. (2021). Does Techno-Pedagogical Content Competencies leverage Student Teachers Professional growth: An Investigation, Akshar Wangmay, 4(4): 46-48
- Padmavathy, R.D. (2021). Assessing the Attitude of University Students towards E-learning: A Case Study of Tezpur University, *Indian Journal of Adult Education*, 82 (2): 146-157.
- Saikia, J. and Padmavathy, R.D. (2021). Perception of Pre-Service Teachers towards Technological Pedagogical and Content Knowledge (TPACK), *International Journal of Biology, Pharmacy and Allied Sciences*, 10(7): 2495-2509.
- Das, J. and Padmavathy, R.D. (2021). Relationship between Social Networking Addiction and Academic Performance of Undergraduate Students during Covid-19 Pandemic, *Advances and Applications in Statistics*, 70(1): 46-67.
- Chakrawarty, S(2021). Effectiveness of Collaborative Learning in Enhancing Motivation among 4th Semester Integrated B. Ed. Students of Department of Education, Tezpur University. *Journal of Interdisciplinary Cycle Research*, 13(8): 1276-1285
- Rai, K. and Singh, R. (2021). Conflicts in schools: Causative factors and Resolution strategies. *Journal of Educational, Cultural and Psychological Studies*, 24, 109-127. DOI: <u>https://doi.org/10.7358/ecps-2021-024-rasi</u>
- Chitrakar, N. and Sharma, H. (2021). Problem Solving Ability of Undergraduate and Post Graduate Students of Tezpur University: A Case Study. *Education India Journal: A Quarterly Refereed Journal of Dialogues on Education*, 10(2): 376-386.
- Mushahari, M. and Sharma, H (2022).: Experiential Learning in Pre-Service Teacher Education: Attitude of Teacher Trainees and Challenges Faced. *Journal of Positive School Psychology* 6 (4): 568-576.

Publication of Books

• Padmavathy, R.D., Raja, M., Sharma, R., and Ghosh, L. (2021). *Educational Management: Updating the ways of learning*, Academic Guru Publishing House, ISBN: 978-81-95608188, Bhopal, India. 1st edition.

• Sruthi, S., Padmavathy,R.D. Patil, P.V., Nawale,R., Patil. G.G., and Sujatha,J., , (2021).. Edited *Contemporary Issues in Multidisciplinary Subjects*, *Volume-3*, ISBN: 978-93-239587. In Red Shine Publication PVT.LTD. 1st edition.

Publication of Book Chapters

- Dey, A., Roy, N. & Paul, R. (2021). Emotional Intelligence: A Genere of Transformational Leadership Development. In Mishra, Savita, Biswas, Sanjit & Das Arjun Chandra, editors, *Educational System of Contemporary India*, pages 125-134 Mittal Publications, New Delhi (India).
- Padmavathy,R.D. (2021). Reasoning Ability and Research Attitude among Graduates: A New Look. In Jain, K.A., and Kaur. P, editors, *Emerging Paradigm in Management and Social Science*, pages 143–148, National Press Associates, New Delhi.
- Padmavathy, R.D. (2021).Understanding the Role and Potential of Media literacy in promoting Mathematical Competencies: Need of Hour. In Tripathy, S., editor, *Emerging New Age Challenges and Opportunity in Social Science*, pages 68-73, INSC International Publishers.
- Padmavathy, R.D. (2021). Extend Duration of B.ED & M.ED Programme: Augment Excellence among Aspiring Teachers. In Sruthi, S., Padmavathy, R.D., Patil, P.V., Nawale, R., Patil. G.G., and Sujatha, J., editors, *Contemporary Issues in Multidisciplinary Subjects*, Volume-3, pages 70-77, ISBN: 978-93-239587. Red Shine Publication PVT.LTD.
- Singh, R. & Mukherjee, D. (2021). Exploration of Innovative Classroom Practices with Special Reference to NCF 2005 and Educational Perspective of Rabindranath Tagore: A Reflective Study. *In Meaningful Education*, pages 71-78, ISBN:978-93-90953-42-4. Twenty first Century Publications.
- Pradhan S. (2021). Measurement of Creativity. In *Measurement and Evaluation in Education*, pages 303-321, ISBN: 978-93-91026-46-2. Krishna Kanta Handiqui State Open University
- Mushahari, P. & Sharma, H. (2021). A Study on Teacher Trainees' Perception towards Community Engagement in Teacher Education Programme of Tezpur University. In Loyi, R. & Taba, P. editors, *India/Northeast India: Issues, Dynamics and Emerging Realities*, pages 251-264, ISBN 978-81-950485-4-0. Kumud Publications.
- Sharma, H. (2021). Role of NCC in Personality Development of Youth in India. In Swain, S. & Jena, B. editors, *Extension Services in Higher Education* pages 51-60, ISBN 978-81-953651-6-6. Kunal Books.
- Koch, P. & Sharma, H. (2022). The Foundation Stage: A National Education Policy 2020 Perspective. In Deepa, et al editors, *Language Literature and Education* pages 9-16, ISBN 978-93-91060-89-3. Banalata.

| Inventor(s) | Patent Title | Application/ | Published/ | Country | | |
|--------------------------------------|-------------------|-----------------|------------|---------|--|--|
| | | Patent Number | Granted | | | |
| Jayaprakash J., Dr. R.D. Padmavathy, | Tracking, | Application No: | Published | Indian | | |
| Dr. Dhiren Ramanbhai Patel, Raghav | Observation, and | 202241000408 | | | | |
| Dwivedi, Dr. D. Prasanna, S. | Monitoring of | | | | | |
| Syedakbar, Bheemaraju Sarni, Prof. | School Children's | | | | | |
| Rashmin, Shaileshbhai Tanna, Prof. | Using Android | | | | | |
| Riddhi Rashmin Tanna and | Mobile and NFC | | | | | |
| D.Vidhyalakshmi | Technology | | | | | |
| Dr. R .D. Padmavathy, Dr. K. | Methodology For | Application No: | Published | Indian | | |

Publication of Patents

| Akalyadevi, Dr. M S Suganthiya, | Implementation | 202211002249 | |
|----------------------------------|-------------------|--------------|--|
| Thatikonda Somashekar, Parepalli | Online Classroom | | |
| Nageswara Rao, Anagha Mahajan, | Platform Learning | | |
| Manohar Manchala, Shweta Suraj | Technique | | |
| Bandhekar, Dr. S. Padmapriya, | | | |
| Dr. Huma Khan, Prof. Makhan | | | |
| Kumbhkar, Dr. Yameen Khan and | | | |
| Ankur Gupta | | | |

Conference/Workshop/Symposium/Seminar etc. Attended

| Name of Faculty/Staff Member | Purpose of Attending | Title of Event | Date/Period | Organizer and Venue |
|------------------------------------|-------------------------|---|--------------------------------------|--|
| N. R. Roy | Paper presentation | International Seminar on Online Teacher Effectiveness and Digital Capabilities: Keys for Quality Education and Research | 05-10-2021 to 06-10-2021 | Faculty of Humanities and Social Sciences, Chiang Mai Rajabhat University, Chiang Mai, Thailand in collaboration with the Department of Philosophy and IQAC, Morn College, Moranhat, Charaideo Dist., Assam, India and Department of Education and IQAC, NEHU, Shillong, Meghalaya, India |
| | Paper presentation | ICSSR-NERC Sponsored Two Day National Seminar on Efficacy of Virtual Learning in Higher Education Institutions in the Plight of COVID-19 | 10-01-2022 to 11-01-2022 | Department of Education, Lakhimpur Girls' College, Khelmati, North Lakhimpur, Assam |
| | Chief Guest | Workshop on Vocational Education Pedagogy Action Plan 201-22 | 26-10-2021 | Mahatma Gandhi National Council of Rural Education, Hyderabad (Online) |
| | Participation | Summit of North East VC's for NEP 2020 Implementation | 13-11-2021 | Shiksha Sanskriti Utthan Nyas (North East) |
| Padmavathy, R.D | Paper presentation | International Conference on "Contemporary Teaching Pedagogy in Pluralistic Society" | 20-08-2021 to 21-08-2021 | DAV College,Dehradun, and CEAM Uttarkahand (Online) |
| | Paper presentation | International Virtual on Contemporary Pe in English Language and Cultural Studies | rspectitves , Diter0+062 1 | Sourashtra College Madurai (Online) |
| | Paper presentation | International Conference on Global Issues In Multidisciplinary Academic Research | 31-10-2021 | IARA & Rajabhat Maha Sarakham University, Thailand (Online) |

| | Paper presentation | International Conference on "Emerging Trends of Education in Post COVID World" | 27 -11- 2021 | Shri Shivaji Shikshan Prasarak Mandal's Colloge of Education, Barshi (Online) |
|-------------------------|-----------------------|---|--------------------------------|--|
| | Paper presentation | International E- Conference on "Recent Trends and Research Methodology in Arts and Humanities" | 18-01-2022 | Sholapur Social Association's Arts & Commerce College, Solapur (Online) |
| Sashapra Chakrawarty | Paper presentation | Techno-Pedagogical Skill: An Indispensable Skill for a 21 st Century Teacher | 03-03-2022 to 05-03-2022 | Mar Theophus Training College, Nalanchira, Thiruvanthapuram (Online) |
| | Paper presentation | Student Engagement: The Pathways To Academic Performance. | 27-11-2021 to 29-11-2021 | RavindraNath Tage University, Hozai, Assam (Online) |
| | Paper presentation | ICT Competency of B.Ed. Teachers Trainees of the Nagoan District during Pandemic | 25-09-2021 to 26-09-2021 | Christ College of Education for Women, Tamilnadu (Online) |
| Sradhanjali Pradhan | Paper presentation | Two Days National Seminar on " Teacher Education in the Perspective of NEP 2020" | 15-03-2022 to 16-03-22 | IASE Agartala, Tripura |
| Yeasmin Sultana | Paper presentation | Two-Day National Seminar on Teacher Education in the Perspective of NEP 2020 | 15-03-2022 to 16-03-2022 | Institute of Advanced Studies in Education (IASE) in collaboration with State Council of Educational Research and Training, (SCERT) Govt. of Tripura |
| | Paper presentation | International Conference on Education, Research and Technology,2022 | 27-01-2022 | School of Education, Adamas University in partnership with International Organisation of Educators and Researchers, Indonesia and Philippines |
| | Paper presentation | Two-Day National Seminar on Teacher Education in the Perspective of NEP 2020 | 15-03-2022 to 16-03-2022 | Institute of Advanced Studies in Education (IASE) in collaboration with State Council of Educational Research and Training, (SCERT) Govt. of Tripura |

Invited Talk

| Name of | Title of the Talk | | Title of the | Event | Date | Organizer | and |
|---------|---------------------|--------|--------------|-------------|------------|------------|-----|
| Faculty | | | | | | Venue | |
| Member | | | | | | | |
| N. R. | Multi-Disciplinary, | Inter- | Five Days | workshop on | 10-11-2021 | National | Law |
| Roy | Disciplinary and | Trans- | Curriculum | Development | | University | and |

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| Disciplinary Curriculum: A | | | Judicial Academy, |
|---|-----------------------------|------------------|--|
| Discussion on Conceptual | Courses | | Assam |
| Convergence and | | | |
| Divergence | | 10.01.2022 | |
| | ICSSR NERC Sponsored | | Department of |
| Learning in Higher Education Institutions in | two Day National Seminar | to 11-01-2022 | Education, |
| | | 11-01-2022 | Lakhimpur Girls' |
| the Plight of COVID-19 | | | College, Khelmati, Lakhimpur, Assam |
| Literacy for Human | International Literacy Day, | 08-09-2021 | Departmet of |
| Literacy for Human Centered Recovery: | | 08-09-2021 | Education, Kumar |
| Narrowing the Digital | 2021 | | Bhaskar Verma |
| Divide | | | Sanskrit and |
| Divide | | | Ancient Studies |
| | | | University |
| Curriculum Designing | Online Refresher Course | 04-08-2021 | UGC Human |
| | on Teacher Education | 0.00 2021 | Resource |
| | | | Development |
| | | | Centre, Aligargh |
| | | | Muslim University |
| | | | (AMU) |
| Designing Curriculum | Faculty Induction | 05-08-2021 | Teaching Learning |
| | Programme (FIP) | | Centre, TU |
| Writing Research Proposal | ICSSR sponsored 10 Days | 24-12-2021 | Department of |
| | Online Research | | Education, Guru |
| | Methodology Courses on | | Ghasidas |
| | Quantitative Research | | Vishwavidyalaya, |
| | Methods and Use of | | Bilashpur (C.G) |
| | Statistical Software for | | |
| | Social Science | | |
| | Researchers | 27.10.2021 | Denter |
| Report Writing in Social Science Research | Online Research | 27-10-2021 | Department of |
| Science Research | Methodology Courses for | | Management & Department of |
| | M.Phil/Ph.D/PDF Scholars | | Teacher Education, |
| | in Social Sciences | | Nagaland |
| | | | University, Kohima |
| | | | Campus, Nagaland |
| | | | Campus, Magaianu |

Awards/Honours/Notable Achievements

| Name of | 0 | Achievement | Event/Awarded by |
|-------------|------------|---------------|--|
| Awardee | of Awardee | | |
| Padmavathy, | Faculty | Best Research | International Conference on "Emerging Trends of |
| R.D | member | Paper | Education in Post COVID World" Awarded by Shri |
| | | Presentation | Shivaji Shikshan Prasarak Mandal's Colloge of |
| | | | Education, Barshi and Punyashlok Ahilyadevi Holkar |
| | | | Solapur University, Solapur. |

Other Significant Activities of the Department

- Workshop on Good Academic Research Practices conducted, 7-12-2021
- National Education Day Celebrated, 11-11-2021

- National Mathematics Day celebrated, 22-12-2021
- Plant Exhibition, 22-12-2021

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|---------------------------|
| NET | 23 | MA in Education and B.Ed. |
| SLET | 02 | MA in Education |
| JRF | 02 | Ph.D. |
| TET | 25 | B.Ed. |
| GATE | 01 | B.Ed. |

Number of Students Qualified in NET-JRF/SLET/GATE etc.

Notable Placement of Students

| Name of Student | Academic Programme | Placement Designation | Company/ Organization | Mode of Selection |
|---------------------------|-----------------------|--------------------------------------|---|----------------------|
| Preeti Lata Devi | B.Ed. | Junior Administrative Assistant | Assam Secretariat | Off-Campus |
| Mayuri Pathak | B.Ed. | Assistant Professor | Birjhora Kanya Mahavidyala | Off-Campus |
| Nabanita Borah | B.Ed. | Assistant Professor (Contractual) | Nazir Ajmal Memorial College of Education, Hojai | Off-Campus |
| Kakoli Baishya | M.A | Guest Faculty | Tezpur University | Off-Campus |
| Priyanka Koch | Phd | Guest Faculty | Tezpur University | Off-Campus |
| Kashyapi Kalita | B.Ed. | Guest Faculty | Tezpur University | Off-Campus |
| Swarnali Bhattacharjee | M.A | Academic Officer | USTM | Off-Campus |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic Programme | Name of other Institute | Enrolled Academic Programme |
|---------------------|-----------------------|---|-----------------------------------|
| Panchali Kaushik | MA in Education | Govt. College of Teacher Education (GCTE, Kokrajhar) | B.Ed. |
| Trisha Mukherjee | MA in Education | Dakhin Guwahati B.Ed. College | B.Ed. |
| Barsha Kalita | MA in Education | Asom Shikshak Prashikshan Mahavidyalaya, Guwahati | B.Ed. |
| Sudipta Nath | MA in Education | College of Teacher Education, Tezpur | B.Ed. |
| Vashwati Sarma | MA in Education | Dakshin Guwahati B.Ed. Guwahati | B.Ed. |
| Porishmita Saikia | MA in Education | Guwahati University | Ph.D. |
| Anamika Dutta | B.Ed. | RIE | M.Ed. |
| Migom Pegu | B.Ed. | NEHU, Shillong | M.Ed. |
| Ruby Das | B.Ed. | NEHU, Shillong | M.Ed. |
| Debjani Chakraborty | B.Ed. | Assam University | M.Ed. |
| Udit Basnet | B.Ed. | RIE | M.Ed. |

DEPARTMENT OF ENGLISH

About the Department

The Department of English, earlier named Department of English and Foreign Languages, was established on July 16, 1994, with a Diploma programme in English Language Teaching. The current two-year M.A. programme in English began in January 1997. The academic programmes offered by the Department of English are: Integrated M.A. in English, M.A. in English, and Ph.D. The Department of Foreign Languages and the Department of Linguistics, which were a part of the Department of English, became separate departments in 2019 and 2022 respectively.

The Department received assistance from the UGC under its Department Research Support-Special Assistance Programme (DRS-SAP-Phase II, 2015-2020). The thrust areas are (1) Understanding Colonial and Alternative Modernities in Travel and Life Writings in Assam and (2) Examining Asian and Indian Influences on Modern Assamese. The Department aims to become a leading research hub in Language and Literary Studies in South Asia and to emerge as a centre for Modernity Studies and Translation Studies in South Asia. The Department further aims to enable students to critically engage beyond conventional disciplinary borders and develop a sense of social responsibility and professional commitment in students.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|---|-----------------------------------|
| M.A. English (4 semesters) | 63 |
| Integrated M.A. in English (10 semesters) | 25 |
| Ph.D. | Variable (admitted 01 in 2021-22) |

Thrust Research Areas of the Department

- Understanding Colonial and Alternative Modernities in Travel and Life Writings in Assam.
- Examining Asian and Indian Influences on Modern Assamese.

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|-------------|--------------------------|---|---|------------------------------------|---|
| Professor | Bijay Kumar Danta | Ph.D. (Utkal University) | American Literature, Critical Theory | bkdanta | 28-03-2006 |
| | Farheena Danta | Ph.D. (Dibrugarh University) | American Literature; Modernist Poetics | fdefl | 11-06-2009 |
| | Prasanta Kumar Das | Ph.D. (Gauhati University) | Indian Writing in English, Book History, Missionary writings, Non-Fictional Prose | prsnt | 30-07-2001 |
| | Sravani Biswas | Ph.D. (NEHU) | Indian Writing in English, Postcolonial Studies with special interest in Partition Literature, Migration and Diaspora studies. | sravani | 09-09-2011 |

| Associate | Debasish | Ph.D. (EFL | Curriculum Development, | deva | 30-09-1997 |
|-----------|-------------|-------------------|-----------------------------|---------|------------|
| Professor | Mohapatra | University, | Materials Production, | | |
| | | Hyderabad) | Language Policy | | |
| | Sanjib | Ph.D. (Tezpur | Life Writing, Indian | ssahoo1 | 27-09-2011 |
| | Sahoo | University) | Writing in English, | | |
| | | | Popular Culture, Travel | | |
| | | | Writing | | |
| | Hemjyoti | Ph.D. (Delhi | Gender and Literature, | hjyoti | 15-06-2001 |
| | Medhi | University) | Women's Movements, | | |
| | | | Vernacular Public | | |
| | | | Spheres, Oral History, | | |
| | | | Digital Humanities | | |
| Assistant | | Ph.D. (Tezpur | Representation in | reita | 31-07-2006 |
| Professor | Narzary | University) | Literature, Gender and | | |
| | | | Literature, New | | |
| | | | Literatures in English, | | |
| | | | Postcolonial Literature | | |
| | Pallavi Jha | Ph.D. (University | Children's Literature, | pjefl | 12-09-2011 |
| | | of Hyderabad) | Indian writing in English, | | |
| | | | Popular Culture/ | | |
| | | | Literature, New | | |
| | | | Literatures in English. | | |
| | Bashabi | Ph.D. (Gauhati | Indian Writing in English, | b_gogoi | 26-08-2011 |
| | Gogoi | University) | Film Studies and | | |
| | | | Adaptation theories. | | |
| | Esther | Ph.D. (Gauhati | Contemporary South | esther | 01-10-2012 |
| | Daimary | University) | Asian English Literature, | | |
| | | | British Literature from | | |
| | | | North East India, Partition | | |
| | | | Literature. | | |
| | Sarat | Ph.D. (EFLU, | ELT | dolesar | 03-04-2017 |
| | Doley | Shc) | | | |
| | Raktima | MA (Tezpur | Modernity studies, visual | rbeng | 01-12-2021 |
| | Bhuyan | University) | studies, African American | | |
| | | | literature, health and | | |
| | | | medicine | | |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the | |
|---------------------|-------------------|-------------------------------|---------------------|--|
| | | | current position | |
| Technical Assistant | Hemen Das | hemen | 02-08-2012 | |
| UDC | Jayanta Kr. Gogoi | jayanta | 24-06-2019 | |
| MTS | Pranab Kr. Borah | pkborah | 01-03-1997 | |

Research Projects (both Ongoing and New)

| Project Title | Funding Agency | Amount (in INR) | Duration | Investigator(s) |
|--|-------------------|--------------------|-------------|-----------------|
| A Stimulus-Appraisal based Study on | DST | 28.4 Lakhs | 3 Years | S. K. Doley |
| Motivation Affect in L2 Learning at the Tertiary | | | (2019-2022) | - |
| Level with reference to Engineering Students | | | | |
| Learning English as an L2 in Assam | | | | |

| SAP- DRS-II | UGC | 98 Lakhs | 5 Years | P.K. Das |
|-------------|-----|----------|-------------|---------------|
| | | | (2015-2020) | (Coordinator) |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Kashyap, D. and Medhi, H. (2021). Between the Peechil-kamra and the Dabusa: Mapping Worldbuilding and Heterotopic Space on Board the Ibis in Amitav Ghosh's *Sea of Poppies*. *Southeast Asian Review of English (SARE)*, 58 (1): 31-45.
- Daimari, E. (2021). The City of Colombo in Carl Muller's *Colombo* and Shyam Selvadurai's. *The Hungry Ghosts.*" *DUJES*, Dept. of English, Dibrugarh University, 29: 300-312.
- Daimari, E. (2021). Review of Pieter Vermeulen's. *Literature and the Anthropocene* (2020) (Book Review). *English Forum: Journal of the Department of English*, Gauhati University, 8&9: 184-188.
- Doley S. (2021). English Speaking Skills and Indian Undergraduate ESL Learners: Interleaving or Block Practice? *Rupkatha Journal on Interdisciplinary Studies in Humanities*, https://doi.org/10.21659/rupkatha.v13n4.57
- Doley S. (2022). L2 Attitude and Motivation of Secondary, Undergraduate, and Postgraduate ESL Learners in India" *Studies in English Language and Education*. https://doi.org/10.24815/siele.v9i1.21321.
- Daimari, E. (2022). The EcoGothic and Contemporary Sri Lankan English Literature: Reading Ecophobia in Patricia Weerakoon's *Empire's Children* and Roma Tearne's *Mosquito*. *Southeast Asian Review of English (SARE)*, 59 (1): 29-50.

Publication of Book Chapters

- Sahoo S. (2022) "The Char and the City: Reading Miyah Poetry", In K M Baharul Islam, editor, *Literatures from Northeast India: Beyond the Centre-Periphery Debate.* pages 88-101, Routledge.
- Daimari, E. and Daimari, I. (2022). "Ecofeminism and Bodo Folktales and Folksongs." In Douglas A. Vakoch and Nicole Anae, editors, *Indian Feminist Ecocriticism*. pages 93-106, Lanham: Lexington Books.
- Danta, F. 2021 "Protocols of Colonial Hunting: Surveillance, Transgression and the Allegory of Empire in F. T. Pollok's *Wild Sports of Burma and Assam*" *Narrative Cultures of North East India*, pages 154-169, Pencraft, New Delhi.

| Name of | Purpose of | Title of Event | Date/Period | Organizer and Venue |
|---------------|---------------|--------------------------|--------------------|------------------------------|
| Faculty/Staff | Attending | | | |
| Member | | | | |
| P.K. Das | Resource | Beginnings and Endings: | 11-08-2021 | Bombay IIT online |
| | Person | Writing a Research Paper | | |
| R. Narzary | Session Chair | International Conference | 16-04-2021 | Department of Management, |
| | | on Gender Studies and | | Humanities and Social |
| | | Women Empowerment. | | Sciences, National Institute |
| | | | | of Technology, Agartala |
| | Participant | International Day of the | 09-08-2021 | National Institute of |
| | | World's Indigenous | | Bodology, Kokrajhar |
| | | Peoples. | | |

Conference/Workshop/Symposium/Seminar etc. Attended

| B. Gogoi | Paper | From Page to Screen: | 19-10-2021 | School of Social Sciences |
|------------|---------------|----------------------------|------------|----------------------------|
| 0 | presentation | The Evolving Dynamics | | and Language, Vellore |
| | 1 | of Film Adaptation". | | Institute of Technology, |
| | | International Virtual | | Chennai. |
| | | Conference on | | |
| | | 'Humanities through | | |
| | | Literature, Film and | | |
| | | Media' | | |
| | Paper | 'His Film': Satyajit | 02-03-2022 | Organized by IACLALS |
| | Presentation | Ray's Vision of Pather | | |
| | | Panchali". International | | |
| | | Online Conference on | | |
| | | 'Circulations, Mediations, | | |
| | | Negotiations: New | | |
| | | Perspectives on | | |
| | | Translation from South | | |
| | | Asia' | | |
| E. Daimari | Participation | Folklore as Resistance: | 09-03-2022 | Dept. of Cultural Studies, |
| | | Insights from North East | | Tezpur University |
| | | India | | |
| | Paper | Pandemic and | 12-03-2022 | SALA 2022 virtual |
| | Presentation | Alternative Medicines: A | | Conference, South Asian |
| | | Reading of Bodo | | Literary Association |
| | | folktales and folksongs | | |
| S.K. Doley | Paper | Pedagogical Effects of | 28-08-2021 | 2nd Rupkatha International |
| | Presentation | Interleaving and Block | | Open Conference (Online) |
| | | Practice on | | |
| | | Undergraduate ESL | | |
| | | Learners' Speaking Skill: | | |
| | | An Experimental Study | | |

Invited Talk

| Name of | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|------------|---------------------|--------------------------|------------|--------------------------|
| Faculty | | | | |
| Member | | | | |
| B.K. Danta | NEP-2020: A | NEP-2020: A Gandhian | 03-02-2021 | Jhanji Hemnath Sarma |
| | Gandhian | Perspective | | College, Jhanji |
| | Perspective | | | |
| | Krishnaleela Texts | International Conference | 05-02-2021 | Ravenshaw University and |
| | in Southern Odisha: | (Online) on The Polite | to | University of Hyderabad |
| | Historicizing | World of Bhakti in | 07-02-2021 | (Online) |
| | Production and | Odisha: From Early | | |
| | Politeness. | Modern to Modern | | |
| | Interdisciplinarity | Faculty Induction | 25-02-2021 | HRDC-JNU, New Delhi |
| | across Locations | Programme - IV | | (Online) |
| | and Disciplines | | | |
| | A Pattern in the | Professor Dilip Kumar | 07-07-2021 | Dibrugarh University |
| | Pursuits: The | Barua Memorial Lecture | | (Online) |
| | Unbilled Hours of | | | |
| | Prof. Dilip Kumar | | | |
| | Barua | | | |
| | Politeness: | Resource Person in an | 17-07-2021 | Ravenshaw University and |
| | Materiality and | International Workshop | | University of Hyderabad |

| Methos in Literary | on "Politeness: In Search | | (Online). |
|---|---|------------|-----------------------------------|
| Cultures | of a Category" | | |
| Edward Carpenter's | Plenary talk at an | 19-07-2021 | University of Burdwan |
| Personal | international webinar In | | |
| Democracy: Re- | Memoriam: In Victorian | | |
| Visiting Late | Times | | |
| Victorian | | | |
| Fellowship, | | | |
| Friendship, and | | | |
| Affect via Dilip | | | |
| Kumar Barua | | | |
| Rivers as Healers in | UGC-HRDC FIP-04, | 11-09-2021 | Gauhati University UGC- |
| India's Literary | Gauhati University | | HRDC (FIP-04 Online) |
| Cultures" [Ganga, | 5 | | |
| Yamuna and | | | |
| Narmada] | | | |
| Review of Literature | Workshop on Research | 22-09-2021 | Ambedkar Centre, Tezpur |
| in Research | Methodology | 22 09 2021 | University |
| The Ideological Turn | | 11-11-2021 | Department of English, |
| in Literature and | Seminar | 11 11 2021 | University of Science and |
| Criticism | Semma | | Technology Meghalaya |
| The ABC of Review | Workshop on Research | 11-11-2021 | Sazolie College, Phenzhu, |
| of Literature and | Methodology | 11-11-2021 | Kohima, Nagaland |
| | Methodology | | Komma, Nagaland |
| Synopsis Writing | | 07 12 2021 | Demonstration of English |
| Good Academic | UGC-GARP in Indian | 07-12-2021 | Department of English, |
| Research Practices: | HEIs | | Tezpur University |
| The 5 I's (Investing | | | |
| in Integrity, | | | |
| Individuals, | | | |
| Institutions, Interests | | | |
| and Instruments) | | 10.10.0001 | |
| Learning Outcome- | Faculty Development | 18-12-2021 | Teaching Learning Centre, |
| Based Teaching | Programme on New | | Tezpur University (Online) |
| (English) | Trends in English | | |
| | Studies | 10.10.0001 | m 1: x : ~ |
| New Materialism | Faculty Development | 19-12-2021 | Teaching Learning Centre, |
| and the Literature of | Programme on New | | Tezpur University (Online) |
| Things | Trends in English | | |
| | Studies | | |
| Rivers as Healers in | UGC-HRDC FIP-05, | 02-02-2022 | Gauhati University UGC- |
| India's Literary | Gauhati University | | HRDC GURU-DAKSHTA |
| Cultures | | | (FIP-05 Online), |
| | | 1 | |
| [Brahmaputra, | | | |
| | | | |
| [Brahmaputra, | | | |
| [Brahmaputra, Vaitarani and | National Webinar on | 12-02-2022 | Ganjam College, Ganjam, |
| [Brahmaputra, Vaitarani and Mahanadi] | National Webinar on Reading Literature | 12-02-2022 | Ganjam College, Ganjam, Odisha |
| [Brahmaputra, Vaitarani and Mahanadi] Four Approaches to Literary Criticism: | | 12-02-2022 | • • • |
| [Brahmaputra, Vaitarani and Mahanadi] Four Approaches to Literary Criticism: Reading | Reading Literature | 12-02-2022 | • • • |
| [Brahmaputra, Vaitarani and Mahanadi] Four Approaches to Literary Criticism: Reading Literature/Doing | Reading Literature | 12-02-2022 | • • • |
| [Brahmaputra, Vaitarani and Mahanadi] Four Approaches to Literary Criticism: Reading Literature/Doing Theory through | Reading Literature | 12-02-2022 | • • • |
| [Brahmaputra, Vaitarani and Mahanadi] Four Approaches to Literary Criticism: Reading Literature/Doing | Reading Literature | 12-02-2022 | • • • |

| | Supervision in English | Supervisors [Panellists: Bijay K Danta, Nirmala Menon, Ashok Mohapatra, Asim | | University of Hyderabad |
|----------|--|--|------------|--|
| | | Siddiqui; Coordinator: K Narayana Chandran] | | |
| | The Power and Horror of Walking: Shadows of Gandhi, Joyce, Faulkner | Seminar on "The Books of 1922," | 23-03-2022 | Department of English, Tezpur University |
| F. Danta | Microspecting Allusions, Absences and Presences in T.S. Eliot's The Waste Land | National Seminar on "The Books of 1922" | 24-03-2022 | Department of English, Tezpur University |
| | The Americanness of American Literature | National Webinar on "Reading Literature across Boundaries" | 12-02-2022 | |
| | Asian American Migration Narratives: The Autobiographical Imperative | International Conference on "Synergising Technology, Language and Literature: Towards Mapping New Directions in Higher Education" | 22-02-2022 | St Joseph's College of Commerce (Autonomous), Bengaluru and Sri Ramkrishna College of Arts and Science (Autonomous), Coimbatore |
| | Migration Narratives- I | Faculty Development Program on "New Trends in English Studies" | 17-01-2022 | Teaching Learning Centre (TLC), Tezpur University |
| | Migration Narratives—II: Reading Asian American Narratives | Faculty Development Program on "New Trends in English Studies" | 19-01-2022 | Teaching Learning Centre (TLC), Tezpur University |
| | Nature in Literature: From God's Book to the Writer's Universe | International Webinar on "Re-connecting Literature and Nature" | 31-07-2021 | ICFAI University, Meghalaya. |
| | Reading African American Literature: History, Themes. Reception (Lecture 1) | Invited Lecture Series | 09-07-2021 | Dept. of English, Vikram Dev Autonomous College, Jeypore, Odisha |
| | Race Matter's in African American Fiction (Lecture 2) | Invited Lecture Series | 10-07-2021 | Dept. of English, Vikram Dev Autonomous College, Jeypore, Odisha |
| | African American Fiction and the Question of Identity (Lecture 3) | Invited Lecture Series | 11-07-2021 | Dept. of English, Vikram Dev Autonomous College, Jeypore, Odisha |
| | Ralph Ellison's Invisible Man and the Politics of Invisibility (Lecture 4) | Invited Lecture Series | 12-07-2021 | Dept. of English, Vikram Dev Autonomous College, Jeypore, Odisha |

| | Asian American Migration Narratives: History, Practice, Politics | Invited Web Lecture Series | | The School of Letters, Mahatma Gandhi University, Kottayam, Kerala) |
|----------|--|--|--------------------------------|--|
| | Race in African American Literature | One-Day National Webinar | 30-06-2021 | Maryam Ajmal Women's College of Science and Technology, Hojai |
| H. Medhi | Sari Nibarani Sabha: Dressing the new Aideo in Early Twentieth Century Assam | National Seminar | 15-03-2022 | Dept of Sociology, Tezpur University |
| | Poharir Mel! Early Women's Associations in Colonial Assam | Women's Day Celebration | 08-03-2022 | IIT, Guwahati |
| | From Feminism and Ecocriticism to Environmental Humanities: A Short Introduction | Faculty Development Program on "New Trends in English Studies" | 18-01-2022 | Teaching Learning Center, Tezpur University |
| | Canon Formation in Asamiya Literature: The Case of Chandraprava Saikiani | Faculty Development Programme | 16-07-2021 | Teaching Learning Center, Tezpur University |
| | Literature and Marginality Session Chair. | National Webinar | 08-07-2021 | Mahapurush Srimanta Sankardev Viswavidyalaya, Nagaon(Online) |
| B. Gogoi | Developing English Vocabulary for Professionals | National Webinar on "English for Engineers and Managers: Approaches for Enhancing Proficiency" | 10-11-2021 | Haldia Institute of Technology, West Bengal |
| | Vocabulary Skills | Induction Programme | 08-11-2021 to 22-11-2021 | School of Engineering, Tezpur University |

Notable Placement of Students

| Name of Student | Academic Programme | Placement Designation | Company/ Organization |
|---------------------------|-----------------------|--------------------------|-----------------------|
| Ruby Balkambe R Sangma | M.A in English | Meghalaya Civil Services | Meghalaya Govt |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic | Name of other Institutes | Enrolled Academic |
|-------------------|-----------|-------------------------------|-----------------------------|
| | Programme | | Programme |
| Rajdeep Barman | Int. MA | Missouri School of Journalism | Masters in Journalism |
| Akunthita Gogoi | Int. MA | New York University | Masters in Creative Writing |
| Priyanuj Mazumdar | Int. MA | Kingston University | Masters in Creative Writing |

| Bidisha Dowarah | Int. MA | Dibrugarh University | M.Phil |
|-----------------|------------|------------------------------|--------|
| Prandeep Tamuli | Int. MA | Gauhati University | Ph.D. |
| Maitreyee Dutta | Int. MA | Gauhati University | Ph.D. |
| Anwesha Gogoi | Int. MA | Dibrugarh University | M Phil |
| Anwesha Gogoi | MA English | Nagaland University | M Phil |
| Medha Devi | MA English | Central University Rajasthan | Ph.D. |
| Jushmi Gogoi | Int. MA | Rajiv Gandhi University | Ph.D. |

DEPARTMENT OF FOREIGN LANGUAGES

About the Department:

The Department of Foreign Languages was established in 2019. It offers a full-time Certificate Course in Chinese and Open Elective Choice Based Credit Type Courses in German, French and Chinese languages. The Department is committed to foster professionals with competent skills in languages, intercultural communication, international affairs and cultural understanding from various nuanced perspectives. Apart from conventional courses, the Department, at the request of the Indian Army, offered a short-term Chinese course for selected personnel. The Department organized a Faculty Development Programme for foreign-language faculty and held several online talks by experts as part of its China Studies lecture series.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|-------------------------------|----------------|
| Certificate Course in Chinese | 39 |

Thrust Research Areas of the Department/Centre

- Cross-cultural studies in foreign languages, literature and film
- Theory & practice in translation studies
- Trends in foreign language studies

Major Facilities/Equipment available

- Smart classroom
- Language laboratory
- Departmental library

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------------|-------------------------|---|---|------------------------------------|---|
| Professor | Prasanta Kumar Das | Ph.D. (Gauhati University) | Literature | prsntdas | 01-07-2019 |
| | Rathijit Chakraborty | M. Phil (JNU) | Chinese Language and Literature | rathijit | 01-07-2019 |
| Assistant Professor | Pallavi | Ph.D. (JNU) | German Literature | manjari23 | 01-07-2019 |
| 1 10jess01 | Daveirou Lanamai | M.A. (Chinese Studies) (JNU) | Chinese Language, Literature & Culture | davei | 01-07-2019 |

Officers and Staff Members

| Designation Name | | <email>@tezu.ernet.in</email> | Date of holding the current |
|------------------|--------------------|-------------------------------|-----------------------------|
| | | | position |
| Office Assistant | Chandra Sekhar Roy | chaser7 | 01-07-2019 |
| MTS | Ranjit Saikia | saikia | 01-07-2019 |

Publications by Faculty and Staff Members Publication of Book Chapters

• Pallavi (2022): Gaining Visibility Through Emotions in Partition-Narrative: Jealousy, Fear and Shock of Male Character in "Lajwanti", In Ara A. (Ed.): *Revisiting Partition. Identity, History and Memory.* Pencraft International, Delhi (Accepted).

Publication of Articles in Conference Proceedings

• Lanamai, D. (2021). Sinicising Naming Practices of Select Ethnic Groups in China. In 14th All India Conference of China Studies, Organised by Institute of Chinese Studies (ICS), Delhi and Cheena Bhavana, Visva-Bharati University, Shantiniketan in partnership with Konrad-Adenauer-Stiftung.

Pedagogy and Content Development

• Customized Chinese Language Course for Army

| Name of | Purpose of | Title of Event | Date/Period | Organizer and Venue |
|----------------|--------------|--|-------------|------------------------------|
| Faculty/ Staff | Attending | | | |
| Member | | | | |
| Lanamai | Paper | 14 th All India Conference of | 11-11-2021 | Institute of Chinese Studies |
| Daveirou | presentation | China Studies | to | (ICS), Delhi and Cheena |
| | | | 13-11-2021 | Bhavana, Visva-Bharati |
| | | | | University, Shantiniketan |
| | | | | in partnership with Konrad- |
| | | | | Adenauer-Stiftung. |
| Pallavi | Paper | XIV Congress of the | 26-07-2021 | International Association |
| | Presentation | International Association for | to | for German Studies |
| | | German Studies (IVG) | 02-08-2021 | (Online) |
| | Participant | Online Faculty Induction | 03-08-2021 | Teaching Learning Centre, |
| | | Programme (FIP) | to | Tezpur University under |
| | | | 02-09-2021 | PMMMNMTT Scheme of |
| | | | | Ministry of Education, |
| | | | | Government of India. |
| | | | | (Online) |
| | Participant | Online Faculty Development | 26-07-2021 | TLC, Tezpur University in |
| | _ | Program on Emerging Areas in | to | association with Dept. of |
| | | Foreign Language Study | 30-07-2021. | Foreign Languages, Tezpur |
| | | | | University |

Conference/Workshop/Symposium/Seminar etc. Attended

Other Significant Activities of the Department

- 14-week Customized Course in Chinese for Army (4 Corps), 30-09-2021 to 10-12-2021.
- Faculty Development Programme: In collaboration with Teaching Learning Centre organized on *Emerging Areas in Foreign Language Study*, 26-07-2021 to 30-07-2021.
- Talk delivered by Dr. Rajiv Ranjan, Associate Professor at the College of Liberal Arts, Institute of Global Studies, Shanghai University, Shanghai, China. *India-China Border Clash and Future of Bilateral Engagement*, 12-04-2021
- Talk delivered by Dr. Hemant Adlakha, Associate Professor of Chinese, Jawaharlal Nehru University, New Delhi. *Salient Features of how Covid-19 has impacted language, culture, and society in China*, 19-04-2021.

Tezpur University :: Annual Report 2021-22 (Department of Foreign Languages)

• Chinese Spring Festival Celebration: Lecture by Mr. Rathijit Chakravarty, Assistant Professor, Department of Foreign Languages and followed by activities such as calligraphy, games and *Chunlian* (Spring Festival couplet), 01-02-2022.

DEPARTMENT OF HINDI

About the Department

The Department of Hindi was established in January 2010, and it started an MA program in Hindi from 2013. At present, the Department also runs the following programs: Post-Graduate Diploma Program in Translation (Hindi), Hindi as a Modern Indian Language (MIL), and Ph.D. in Hindi literature/language). In addition, the Department also runs a Certificate Course in Official Hindi (Level-1) for the employees of the University.

Academic Programmes and Student intake

| Academic Programme | Student Intake |
|---------------------------|----------------|
| Certificate Course | 10 |
| PG Diploma in Translation | 31 |
| MA in Hindi | 31 |
| Ph.D. | Variable |

Thrust Research Areas of the Department

- Modern Hindi Literature
- Fiction
- Poetry
- Bhasha Vigyan
- Indian & Western Poetics
- Folk literature
- Hindi Journalism

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------------|---------------------------|---|--|------------------------------------|---|
| Duchagon | Suryakant Tripathi | Ph.D. (BHU) | Applied Linguistics, Indian Poetics, Folkloristic | <u>sktripathi</u> | 28-05-2018 |
| Professor | Pramod Meena | Ph.D. (IGNOU) | Dalit –Tribal vimarsh, Street Theater, cinema studies, Media | pmeena | 07-06-2022 |
| Associate Professor | Anju Lata | Ph.D. (TU) | Modern Poetry, Katha Sahitaya, Adhunik Sahitay,Subaltern writing in Hindi | anju | 18-11-2019 |
| Assistant | Anushabda | Ph.D. (DU) | Linguistics, Media, Poetry, Indian and Western Poetics. | anush | 20-02-2012 |
| Assistant Professor | Pramod Kumar Sharma | Ph.D. (University of Hyderabad) | Medieval Poetry | pramods | 25-11-2019 |
| | Shipra Shukla | M.Phil. (Delhi | Modern Hindi Literature. | shipras | 02-12-2019 |

| | | University) | | | |
|---------|----------|----------------|-------------------------|----------------|------------|
| | Shambhu | Ph.D. (Jamia | Katha Alochana, | smishra | 04-05-2022 |
| | Nath | Milia Islamia) | Madhaykaleen Sahitaya | | |
| | Mishra | | | | |
| | Santosh | Ph.D. | Katha Sahitay, Alochana | santosh.vishno | 20-09-2021 |
| Guest | Vishnoi. | (Banasthali | | i2010@gmail. | |
| Faculty | | Vidhya | | com | |
| | | Peeth) | | | |

Officers and Staff Members:

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the current |
|-------------|---------------|-------------------------------|-----------------------------|
| | | | position |
| Assistant | Sashi Ingti | ingti | 01-01-2018 |
| MTS | Ajoy Kr. Nath | ajoy | 08-05-2017 |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Lata, A. and Jasmeena, A. (2022). "marang godha nilkantha hua: Parayawaran chintan ka mahakavay", *Naagfani* 40:58-62.
- Jasmeena A. & Lata A. (2022). "Mahamari: vibhishika evam paristhitia : pahalwan ki dholak kahani ke vishesh sandharbh me," *Apmi Mati*. 42
- Anushabda. (2021). Shankardev ka 'Kirtan Ghosha'. Gagananchal. 05:77-81.
- Das, P. & Anushabda. (2021). Asamiya Chay Janagoshthi: Astitwa-Asmita ka prashn. Akshara. 199:32-36.
- Kumar, S. & Anushabda. (2021). Mithakiy Chetana aur Kunwar Narayan ka Kawya. *Apni Maati*. 37:01-09
- Kumar, S. & Anushabda. (2022). Abki agar lauta to Manushyatar Lautunga. Bhasha. 300:86-90
- Anushabda. (2022). Rashtriya Shiksha Niti 2020 ke Bhashai Sarokar. *Dwibhashi Rashtrasewak*. 10:39-44
- Shukla, S. (2021). 'Yudha ki Trasadi our stri Asmita' Apni mati. https://www.apnimaati.com/2021/11/blog-post_16.html

Publication of Books:

• Tripathi S. (2021) *Bhartiya Bhakti Aandolan Aur Shrimant Shankardev*, ISBN No. 978-93-92186-10-3 Lokbharati prakashan, Delhi.

Publication of Book Chapters:

- Tripathi, S. (2022). Rashtriya Chetana aur Bhartendu ka Sahitya. In Garg, M. editor, Aadhunik Hindi Kavita mein Rashtriay Chetana, pages 56-64, Naman Prakashan, New Delhi
- Tripathi, S. (2021). Bhartendu yugin patrakarita : Rashtriya evam Sanskritik utkarsh. In Pandey, R.K. editor. Hindi Patrakarita : Rashtriyata evam Sanskriti, pages 37-45, Sahitya Sanchaya, Delhi.
- Kushwaha, P. & Shukla, S. (2021). Viklangota Bhagidari evam avasar ki samanta, In Apke Kanun apke adhikar, pages 82-100, Orient Black Swan, Hyderabad.

| Name of | Purpose of Attending | Title of Event | Date/Period | Organizer and Venue |
|---------------|-------------------------|-----------------------|--------------------|---------------------------|
| Faculty/Staff | | | | _ |
| Member | | | | |
| Tripathi S. | Lecture on "Hindi ka | 3 days International | 13-09-2021 | Department of Hindi and |
| | vaishvik paridrishya" | Seminar on Hindi | | Linguistics, R.D.U., |
| | | Divas | | Jabalpur (Online) |
| Tripathi S. | Chief Guest | Rajbhasha | 09-12-2021 | Oil India Limited, |
| Lata A. | Lecture On "Hindi | Two Days | 01-03-2021 | Hindi Department, Rajiv |
| | Kahani Ka Itihas : | International Seminar | to | Gandhi University |
| | Punarlekhan | On "Hindi Sahitay | 02-03-2021 | Arunachal Pradhesh |
| | | Ka Itihas : naye | | (Online) |
| | | Prashan vartman | | |
| | | Sandarbh" | | |
| Anushabda | Resource Person | One day online | 21-10-2021 | Commission for Scientific |
| | (Lecture delivered on | National Webinar on | | and Technical |
| | the topic "Nayi Shiksha | "Bhautiki shabdawali | | Terminology, Ministry of |
| | Niti 2020 ka Bhashai | ewam Nayi Shiksha | | Education, New Delhi |
| | Paksh") | Niti 2020" | | (Online) |

Conference/Workshop/Symposium/Seminar etc. Attended

Invited Talk

| Name of Faculty | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|--------------------|---|---|--------------------------------|--|
| Member | | | | |
| Tripathi S. | Rajbhasha Hindi Ka Mahatwa | Hindi Divas | 14-09-2021 | Department of Hindi, S.S.S.U., Kalady, Kerala (Online) |
| Tripathi S. | Rashtranirman mein Hindi Bhasha ki Bhoomika | Hindi Divas | 14-09-2021 | K.V. No.1, Tezpur (Online) |
| Tripathi S. | Corona Kaal ki karun kahaniyan | Ravivariya Pustak Varta | 14-11-2021 | Syahi Blue books,Delhi (Online) |
| Lata A. | Hindi Bhasha Ka Mahatav | Hindi Divas | 14-09-2021 to 15-09-2021 | Biswnath Charali Rastrabhasha Prabhodh Vidyalay , Assam. |
| Anushabda | Rashtriya Asmita aur Hindi | Hindi Diwas, 2021 | 14-09-2021 | Hindi Sahitya Sammelan, Tezpur |
| Anushabda | Wartman Samay mein Hindi ki Satta ewam Mahatta (Online) | Hindi Diwas, 2021 | 14-09-2021 | Kendriya Vidyalay, Dinjan, Assam |
| Anushabda | Bharatiyata ki pahachan Hindi (Online) | Hindi Diwas, 2021 Vivekanand Kendra Vidyalay, Tinsukiya, Assam | 14-09-2021 | Vivekananda Kendra Vidyalay, Tinsukia, Assam |

Awards/Honours/Notable Achievements

| Name of Awardee | Designation of Awardee | Achievement | Event/Awarded by |
|--------------------|-------------------------------|------------------------|--------------------------------|
| Anushabda | Assistant Professor, Dept. of | 'Hindi Bharati Samman- | Vishwa Hindi Sahitya Parishad, |
| | Hindi | 2021 | Delhi on 14 September 2021 |

Other Significant Activities of the Department

- Online lecture series: 'Identity Discourse: Various Currents' 10-03-2021 to 14-03-2021.
- Online lecture series: '*Research and Publication Ethics and the Purpose of E-content*' 29-12-2021 to 30-12-2021.

Number of Students Qualified in NET-JRF/SLET/GATE

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|--------------------|
| NET-JRF | 02 | M.A. |

Notable Placement of Students

| Name of Student | Academic | Placement Designation | Company/ | Mode of Selection |
|-----------------|-----------|------------------------------|--------------|-------------------|
| | Programme | | Organization | |
| Munmi Barthakur | M.A. | Guest Faculty | J.B. College | Off Campus |

Enrollment of Students in other Institutes for Higher Studies

| Name of | Academic | Name of other Institute | Enrolled Academic |
|--------------|--------------------------|---------------------------------|-------------------|
| Student | Programme (in TU) | | Programme |
| Nafisa Ahmed | M.A. | Assam University (Diphu Campus) | Ph.D. |

DEPARTMENT OF LAW

About the Department

The Department of Law was established in the year 2017 under the school of Humanities and Social Sciences with a vision to produce legal luminaries to add value in the field of teaching, judiciary, lawmaking, law enforcement officers and, most importantly, work for the society as a good citizen. Presently, the Department offers a two-year Master of Laws (LL.M.) programme with specializations in Human Rights Laws and Criminology & Criminal law. The objective of the programme is to make the Department a vibrant centre of legal education and research and give an opportunity to all aspirants who wants to be good academicians and researchers and work for social transformation. Two batches of the Department have successfully post-graduated in the year 2020 and 2021, respectively.

The Department is making progress with the existing four young and energetic permanent faculties and Guest faculties, giving meaning to the designed curriculum not only from theoretical but pragmatic aspects emphasizing on teaching inter-disciplinary facets. The faculty members have a wide range of interests and expertise in areas such as Constitutional Law, Judicial Process, Jurisprudence, Human rights, Migration laws, Environment Laws, Criminal laws, Juvenile Justice, etc. The Department makes an effort to expose the students to the prevailing social realities and legal developments through activities such as outreach programmes, Seminars, Workshops, Panel Discussions etc. Moreover, it is the Department's priority to inculcate among students teaching methods & ethics, promote inter-disciplinary research, provide free legal assistance for persons in need and inspire students for competitive examinations. The department has proposed to start the Five-Year B.A.LL.B.(Hons.) and Ph.D. Programmes.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|------------------------|----------------|
| Master of Laws (LL.M.) | 25 |

Thrust Research Areas of the Department

- Constitutional Law
- Judicial Process
- Law and Social Transformation
- Criminal Law
- Human Rights Laws

Major Facilities/Equipment available

- Central Library with Law text books, reference books and journals
- Subscription of SCC Online and Manupatra
- ICT enabled classroom
- Computer Lab

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|-------------|--------------|---|---------------------|------------------------------------|---|
| Associate | Priya Ranjan | Ph.D. (Gauhati | Constitutional Law, | pranjan | 12-12-2019 |

| Professor | Kumar | University) | Administrative Law, Judicial Process, | | |
|-----------|-------------|--------------------|--|----------------|------------|
| | | | Jurisprudence, Law | | |
| | | | of Contract, and | | |
| | | | Socio Economic | | |
| | | | Offences | | |
| | Angel H. | LL.M. (Symbiosis | Human rights, | angelsy | 11-01-2017 |
| | Syiem | Law School, Pune) | International Law, and Tribal issues | | |
| | Madhumita | LL.M. (Assam | Criminal Law, | madhuap | 16-01-2017 |
| | Acharjee | University) | Criminology, | | |
| Assistant | | | Juvenile Justice, and | | |
| Professor | | | Rights of elderly | | |
| | | | persons | | |
| | Debajit | LL.M. (IP | Criminology and | dksarmah | 06-02-2017 |
| | Kumar | University, Delhi) | Criminal Law | | |
| | Sarmah | | | | |
| | Bhagyashree | LL.M. (Gauhati | Criminal Law, | Bhagyashreedas | 28-03-2022 |
| | Das | University) | Penology, and | 18@gmail.com | |
| Guest | | | Environmental Law | - | |
| Faculty | Sriparna | Ph.D. (Gauhati | Human Rights Laws, | Sriparna1009@ | 29-03-2022 |
| | Rajkhowa | University) | Humanitarian Law, and Medical Law | gmail.com | |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the current position |
|------------------|---------------------|-------------------------------|--------------------------------------|
| Office Assistant | Mrs. Meetaly Tamuly | meetaly | 18-11-2019 |
| M.T.S | Mr. Chand Mohammad | chandmd | 01-03-1998 |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Sarmah, D. K. (2021). Policy and Laws related with Environment Protection in India. Sambodhi Indological Research Journal of L.D.I.I., 44-01(XV): 118-123
- Sarmah, D. K. (2021-22). Investigation under the Code of Criminal Procedure. *Kashmir Journal* of Legal Studies, IX: 195-206
- Kumar P. R. (2021). Raashtreeya Shiksha Neeti Va Kaanoonee Shiksha. *Mekal Meemaansa*, 13(02): 237-245.
- Syiem. A. H. and Kumar P.R. (2022). Trans Rights Are Human Rights: An Evaluation of Law on the Protection of Transgender Rights in India. *Indian Journal of Law and Justice*, 13(1): 205-227.

Conference/Workshop/Symposium/Seminar etc. Attended

| Name of | Purpose of | Title of Event | Date/Period | Organizer and |
|--------------|---------------|---------------------------------|--------------------|---------------------|
| Faculty | Attending | | | Venue |
| | Participation | Online Interdisciplinary | 06-12-2021 | TLC, Tezpur |
| Priya Ranjan | | Refresher Course on Pedagogical | to | University (Online) |
| Kumar | | Innovations in Higher Education | 20-12-2021 | |

Invited Talk

| Name of Faculty | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|--------------------------|--|---|------------|---|
| Member | | | | |
| | Covid-19 and Role of State Disaster Management Authority: Legal and Administrative Reflection. | Webinar on Covid-19: Necessary Reflection on The Disaster Management Act, 2005 | 17-05-2021 | Legal Cell, Nagaland University (Online) |
| Priya Ranjan Kumar | Resource Person-Practice of Witch hunting in India and Human Rights Violation (21st Dec) | Short Term Course in Human Rights | 21-12-2021 | UGC-HRDC, Kumaun University, Nainital (Online) |
| | Resource Person- Artificial Intelligence and Human Rights: Issues and Challenges (22nd Dec) | Short Term Course in Human Rights | 22-12-2021 | UGC-HRDC, Kumaun University, Nainital (Online) |
| Madhumita Acharjee | | National Webinar organized on Observation of Constitution Day | 26-11-2021 | Department of political Science in collaboration with NSS Unit Acharya Brojendra Nath Seal College |
| Angel H. Syiem | Sensitization on Laws relating to Sexual Harassment at Workplace | Orientation of Students | 27-10-2021 | Department of Mass Communication and Journalism, TU |

Other Significant Activities of the Department

- Workshop on SSC Online legal research Database, in association with Eastern Law Agency, 27-04-2021
- Invited Lecture on "Law of Sedition". Resource Person- Prof. Manik Chakraborty (Former Professor Burdwan University, West Bengal), 07-08-2021
- Special lecture on "Our earth matters: Ideas for Stockholm+50". Resource Person Prof. Bharat H. Desai (JNU, New Delhi), 03-11-2021.
- International Human Rights Day Observation and a Webinar was organized on "Understanding Substantive Equality under Indian Constitution", 10-12-2021.
- Awareness Programme on Good Academic Research Practices, 22-12-2021 & 23-12-2021.
- Invited Lecture on "Revisiting the general Exceptions & Right to Private defence Under Indian Penal Code". Resource Person- Dr. Samraggi Chakraborty (Head (i/c) Ajeenkya D. Y. Patil University, Mumbai, 24-12-2021.
- Invited Lecture on "Parliamentary privileges: Experience from Indian and British Parliament" was. Resource Person- Prof S.P Singh (CNLU, Patna), 15-02-2022.
- Webinar on "Women in Legal Education-Past Present and Future". Resource Person- Hon`ble Smt. Justice Marli Vankung (Gauhati H.C.) & Prof. Lisa P. Lukose (I.P University), 08-03-2022.
- Invited Talk on "Good Governance- Accountability & Transparency". Resource Person- Prof. S. D. Sharma (S.S.J. University, Uttrakhand), 14-03-2022.
- Invited Talk on "E- Commerce and Consumer Rights in India". Resource Person- Prof. S.C. Roy (CNLU, Patna), 15-03-2022.

- Invited Talk on "Human Rights and Role of Police". Resource Person- Prof. Umesh Kumar (H.P University, Shimla), 16-03-2022.
- Three-Day Workshop on Legal Research Methodology, 21-23-2022.
- Legal Awareness Camp organised at Besseria Village, Tezpur, 26/03/2022.

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|-------------------------|
| AIBE | 13 | Master of laws (L.L.M.) |

Notable Placement of Students

| Name of Student | Academic Programme | Placement Designation | Company/ Organization | Mode of Selection |
|-----------------------------|------------------------|--------------------------|---|----------------------|
| Pompi Saikia | Master of Laws (L.L.M) | Language Officer | APSC, Legislative department, Govt. of Assam | Off Campus |
| Prince Kumar | Master of Laws (L.L.M) | Research Associates | Geeta Institute of Law | Off Campus |
| Bikram Baro | Master of Laws (L.L.M) | Assistant Professor | Kokrajhar Law College | Off Campus |
| Pritiparna Bhattacharjee | Master of Laws (L.L.M) | Internship | Bureau of Police Research & Development, Ministry of Home Affairs | Off Campus |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic Programme | Name of other Institute | Enrolled Academic |
|-----------------|-------------------------|-------------------------------|-------------------|
| | | | Programme |
| Ajay Kr. Sardar | Master of Laws (L.L.M.) | North Eastern Hill University | Ph.D. |
| Dipshreeya Das | Master of Laws (L.L.M.) | Sikkim University | Ph.D. |

DEPARTMENT OF LINGUISTICS AND LANGUAGE TECHNOLOGY

About the Department

Established in March 2022 as an independent Department, the *Department of Linguistics and Language Technology*, which was part of the Dept. of English before, offers a two-year Master's in Linguistics and Language Technology and guides PhD research in the discipline. The Department has expertise in Syntax, Cognitive Linguistics, Philosophy of Language, Language Documentation, Field Linguistics, Phonetics, Phonology, Experimental Phonology, Sociolinguistics, and Computational Linguistics. The Department, in collaboration with the *Centre for Endangered for Endangered Languages*, which was established in 2014 and is now attached to it, carries out research in linguistics with a special focus on the languages of the Northeast, perhaps linguistically the richest yet most diverse area in India with its majority of lesser-known or under-studied languages.

The vision of the Department is to become a leading Centre of linguistic inquiry and research in the country as well as South East Asia. Its mission is to impart knowledge of all the major branches of modern linguistics and linguistic thought to the students through quality teaching with a learner-centered approach. The Department has a well-designed master's course syllabus covering the latest developments in the discipline. The Department encourages excellence in linguistic research and aims to produce young linguists who will have a clear understanding of how language, 'the most valuable single possession of the human race', works and why; who can build and test theories based on accurate descriptions of languages, sound empirical methodologies and results from a range of disciplines, and who can meaningfully apply the knowledge of linguistics in modern technology for technology transfer; in language teaching and also in linguistic issues of the society. Finally, the Department encourages the study of all aspects of the lesser known and endangered languages, especially those spoken in this region, supplementing the efforts for their preservation and revitalization.

| Academic 1 | Programmes | and | Student | Intake |
|------------|------------|-----|---------|--------|
|------------|------------|-----|---------|--------|

| Academic Programme | Intake |
|---|-----------------------------------|
| MA in Linguistics and Language Technology | 30 |
| PhD | Variable (03 admitted in 2021-22) |

Thrust Research Areas of the Department

- Linguistic theory
- Linguistic technology
- Endangered languages of Northeast India

Major Facilities/Equipment available

The Department houses the *Centre for Endangered Languages* so that the students, the research scholars, the faculty and the staff of the Department have easy access to the Library of the Centre which is wellstocked with books on all important areas of linguistics, language endangerment, and language documentation. The Department has also an easy access to the Centre's state-of-the-art Linguistic and the Documentation-Archiving-cum-Recording Laboratories as well as its two advanced multipurpose Seminar-cum Conference Halls. Furthermore, the classrooms of the Department have most facilities of a smart class room.

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current |
|-------------|-----------|---|------------------------------|------------------------------------|-----------------------------------|
| | | | | | position |
| | Madhumita | Ph.D. | Linguistics (Syntax, | mmb | 07-09-2010 |
| Professor | Barbora | (TU) | Psycholinguistic), Field | | |
| | | | Linguistics, Documentation | | |
| | Gautam K. | PhD | Linguistics (Syntax: | gkb | 02-07-2012 |
| | Borah | (NTNU, | Construction Grammar, | | |
| | | Norway) | Semantics), Cognitive | | |
| | | | Linguistics, Philosophy of | | |
| | | | Language, Cognitive Poetics, | | |
| | | | Literary Theory | | |
| | Arup Kr. | PhD | Language Typology, | akn | 20-09-2012 |
| | Nath | (JNU) | Morphology, | | |
| | | | Sociolinguistis, Language | | |
| | | | Documentation Field | | |
| | | | Linguistics | | |
| | Bipasha | Ph.D. | Phonetics, Phonology, | bipasha | 21-09-2012 |
| Assistant | Patgiri | (Tezpur | Historical Linguistics, | _ | |
| | | University) | Sociolinguistics, | | |
| Professor | | | Typology, Semantics, | | |
| | | | Ethnolinguistics | | |
| | Amalesh | PhD | Acoustic Phonetics, | amalesh | 22-04-2016 |
| | Gope | (IIT, | Experimental Phonology, | | |
| | | Guwahati) | Computational Linguistics, | | |
| | | | and Language | | |
| | | | Documentation | | |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the current position |
|------------------|-------------------|-------------------------------|---|
| Office Assistant | Dipali Sona Nayak | dipasn@tezu.ernet.in | 08-03-2022 |

Major Research and Development Findings:

| Faculty/Researcher | Salient Research Findings |
|-----------------------------|---|
| Faculty of Dept of | Seven primers of the following endangered languages have been |
| Linguistics and Language | published: Biate, Khelma, Hrangkhol (Assam); Onaeme, Purum |
| Technology | (Manipur); and Yimchunger and Liangmai (Nagaland). Three separate |
| and Centre for Endangered | volumes on the syntax, morphology, and phonology of the above- |
| Languages (8), Research | mentioned languages also have been published. Also, seven separate |
| Associates (4) and Filed | tri-lingual dictionaries of these languages are in the making. A common |
| Assistants (8) | online version of these seven dictionaries will also be made available |
| Coordinator: | once their offline versions are ready along with a comprehensive |
| Prof. Madhumita Barbora | ethnographic account of these languages. |
| Documentation and | The first field trip is completed. The data collected are being analyzed. |
| Revitalization of Ntenyi, | |
| Khongdei and Zyphe: Three | |
| endangered languages of | |
| North East India | |
| PI: Prof. Madhumita Barbora | |

| Project Title | Funding | Amount | Duration | Investigator(s) |
|---------------------------|---------|----------|----------------|------------------------------------|
| | Agency | (in INR) | | _ |
| UGC Scheme: Centre for | UGC | 6000000 | 5 years | Faculty of Dept of Linguistics and |
| Endangered Languages | | | (Extended till | Language Technology |
| | | | 31-03-2023) | and Centre for Endangered |
| | | | | Languages |
| | | | | |
| | | | | Madhumita Barbora (Coordinator) |
| Documentation and | NEC | 7910000 | 3 years | Madhumita Barbora (PI) |
| Revitalization of Ntenyi, | | | 2020-2023 | Arup K Nath (CoPI) |
| Khongdei and Zyphe: Three | | | | |
| Endangered Languages of | | | | |
| Northeast India | | | | |

Research Projects (both Ongoing and New)

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Gope, A. (2021). The phonetics of tone and voice quality interactions in Sylheti. *Languages. SI: Exploring the Interaction between Phonation and Prosody*. 6(4): 154.
- Mahanta, S., Gope, A., and Roychaoudhury, P. (2021). Pitch range and voice quality in Dimasa focus intonation. *Languages. SI: Exploring the Interaction between Phonation and Prosody*. 6(4): 185.
- Pal, A., Gope, A., and Iannacchione, G. S. (2021). Temperature-dependent pattern formation in drying aqueous droplets of lysozyme. *International Journal of Innovative Research in Physics* (IJIIP), 2(3): 61-70.
- Pal, A., Gope, A., and Iannacchione, G.S. (2021). Concentration and temperature dependence of Protein and Blood Drying Droplets. *Biomolecules*, 11(2): 231.
- Patgiri, B. (2021). Voicing assimilation as a universal phonological process: A case study of Nalbaria Assamese. *International Journal of Dravidian Linguistics (IJDL)*, 50: 134–164.
- Sabnam, Mehsina, and Nath, A. K. (2021). A comparative study of color expressives in Bodo, Deori and Mising. *Shodh Sanchar Bulletin*. 11(41): 40-45.
- Sinha, N, and Barbora M. (2021). Language endangerment amongst Hruso-Aka and Koros. *Vaak Manthan*, 6 (11): 1-16.
- Wangno, T. and Barbora, M. (2021). Nocte kinship system, terminologies and its affinity to PTB roots. *Indian Journal of Multi-lingual Research and Development (IJMRD)*, 2 (3). DOI htpps://doi.org/ 10.34256/ijmrd2135,
- Sabnam, Mehsina and Nath, A. K. (2022). Identifying word-classes of expressives in Bodo, Deori and Mising.

Aligarh Journal of Linguistics, 11: 155-170.

Publication of Edited Books

• Barbora, M. and Borah, G. K. (Eds). (2021). *The Syntax of Biate, Hrangkhol, Khelma, Purum, Onaema, Liangmai and Yimchunger*. (A publication from Centre for Endangered Languages, Tezpur University). S. S Graphics: Guwahati.

- Nath, A. K., Longmailai, M. and Shougrakpam, D. (Eds). (2021). *The Morphology of Biate, Hrangkhol, Khelma, Purum, Onaema, Liangmai Yimchunger*. (A publication from Centre for Endangered Languages, Tezpur University). S. S Graphics: Guwahati.
- Patgiri, B., Gope, A., and Srangthem, B. (Eds). (2021). *The Phonetics and Phonology of Biate, Hrangkhol, Khelma, Purum, Onaema, Liangmai and Yimchunger*. (A publication from Centre for Endangered Languages, Tezpur University). S. S Graphics: Guwahati.

Publication of Book Chapters

- Nath, A. K. (2021). Bhaxar Xongkot aru Axomiya Bhaxa (Language Endangerment and the Assamese Language). In Kalita, N and Bora B., editors, *Bhaxabigyan Aru Axomiya Bhaxa*. pages 613-625, Purbayon Prakashan, Guwahati.
- Patgiri, B. (2021). Phonetics and Phonology of Hrangkhol: A Case of Voiceless Sonorants. In B. Patgiri, A. Gope and B. Sarangthem, editors, *Phonetics and Phonology of Biate, Hrangkhol, Khelma, Purum, Onaeme, Liangmai and Yimchunger*. (A publication from Centre for Endangered Languages, Tezpur University). pages 22-49. S. S Graphics, Guwahati.
- Gope, A., and Raguibou, I.D. (2021). *The Phoneme Inventory and Tonal Contrasts in Yimchunger*. In B. Patgiri, A. Gope and B. Sarangthem, editors, *Phonetics and Phonology of Biate, Hrangkhol, Khelma, Purum, Onaeme, Liangmai and Yimchunger*. (A publication from Centre for Endangered Languages, Tezpur University). pages 142-165. S. S Graphics, Guwahati.
- Pal, A., Gope, A. and Iannacchione, G. S. (2021). Statistical Image Analysis of Drying Bovine Serum Albumin Droplets in Phosphate Buffered Saline. In Dash, S., S. K. Pani, S. Balamurugan and A. Abraham, editors, *Information Retrieval Models for Biomedical and Health Informatics, Artificial Intelligence and Soft Computing for Industrial Transformation*. pages 213-236, Scrivener Wiley Publishing.
- Widinibou, C. and Gope, A. (2021). The Phonetics and Phonology of Liangmai. In B. Patgiri, A. Gope and B. Sarangthem, editors. *Phonetics and Phonology of Biate, Hrangkhol, Khelma, Purum, Onaeme, Liangmai and Yimchunger*. pages 110-141. (A publication from Centre for Endangered Languages, Tezpur University).

Publication of Articles in Other Forms

- Nath, A.K. An article titled 'Bhaxa Police' (*Language Policing*) published on the editorial page of the 'Dainik Axom' a leading Assamese Daily, 1-02-2022
- Nath, A.K. An article titled 'Xenophobic Axomiyar Apobad' (*Defaming Assamese as Xenophobic*) published in the editorial page of the 'Niyomiya Barta' a leading Assamese Daily, 1-10-2021.
- Nath, A.K. An article titled 'Mishrito Xikhon-Xikon Potdhoti Aru Aantogathonigoto Protyahban' (*Blended Teaching-Learning Method and the Infrastructural Challenges*) published in the editorial page of the 'Amar Asom' a leading Assamese daily, 11-06-2021.

| Name of Faculty/ Staff | Purpose of Attending | Title of Event | Date/ Period | Organizer and Venue |
|------------------------------|-------------------------|----------------------------------|-----------------|-----------------------------|
| Member | | | | |
| Gautam K. | Paper | 43rd International Conference of | 21-12-2021 | Central Institute of Indian |
| Borah | presentation | Linguistic | to | Languages, Mysuru. |
| (with | | Society of India, (Online) | 23-12-2021 | |

Conference/Workshop/Symposium/Seminar etc. Attended

| Bisalakshi | | | | |
|------------|--------------|---------------------------------|------------|------------------------|
| Sawarni) | | | | |
| Bipasha | Paper | 1st International Conference of | 26-06-2021 | Centre for Endangered |
| Patgiri | presentation | Tibeto-Burman Linguistics | to | Languages, Tezpur |
| | | Association of North East India | 28-06-2021 | University and Assam |
| | | (ICTiBLANEI – 1) | | University, |
| | Participant | Faculty development program on | 21-08-2021 | Department of English, |
| | | Open Book Testing in Online | | Tezpur University |
| | | Evaluation | | |
| | Participant | Workshop on Linguistic Data | 2-07-2021 | Society for Endangered |
| | | Management for Language | to | Languages SEL |
| | | Archiving | 3-07-2021 | |
| | Participant | Workshop on Wiley Training: | 17-06-2021 | DeLCON Consortium and |
| | | Accessing Wiley Journals and | | Wiley Publication |
| | | Publication Tips for Authors | | Company |

Invited Talk

| Name of Faculty Member | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|------------------------------|---|---|--------------------------------|--|
| Madhumita Barbora | Kho-Bwa Cluster of Languages | 4-Day on International Webinar on the Languages of Northeast India | 24-04-2021 to 27-04-2021 | TiBLANE, Hosted at Assam University, Silchar |
| Gautam K. Borah | The Mass-Count Distinction in Cognitive Linguistics | Invited talk (online): Cognitive Linguistics Research Forum, India | 12-09-2021 | University of Madras |
| Arup Kumar Nath | The myth of Mother Tongue and the Problems, Challenges, and Strategies in Implementing NEP2020 in Northeast India Matribhaxa ba Sthaniya Bhaxar Madhyamere Prathomik Xikhya: Ek Bigyanxonmot Bisleswan (Imparting Primary Education through Mother Tongue: A Scientific Analysis) | One-day National Seminar United Colours of languages and NEP 2020 IQAC, Dept of Assamese Lecture Series | 27-04-2022 22-03-2022 | Vidya Vistar Committee and NEP Committee of Vivekananda College, the University of Delhi in collaboration with the Government Model College (University of Dibrugarh), Assam. Nowgong Girls' College, Nagaon, Assam on jointly organized by the Department of Assamese, IQAC (Nowgong Girls' College) and the Nagaon District Sahitya Sabha |
| | Janagosthiya Bhaxar Xongbardhan | Tiwa Mathonlai Tokhra, Annual Meet | 26-02-2022 | 12 th Session of Tiwa Sahitya Sabha (Tiwa Mathonlai Tokhra) |

| | Aaru Xurakhyar Khetrat Aamar Koroniya (Our duties and responsibilities towards the growth and preservation of indigenous/tribal languages) | | | Meet at Barapujia, Morigaon |
|--------------------|---|---|---|---|
| | Trilingual Glossary of Engineering in the Assamese Language | Preparation of a Trilingual Glossary of Engineering in the Assamese Language | 27-12-2021 to 31-12- 2021; 31-01-2022 to 04-02-2022 | Commission for Scientific and Technical Terminology, Ministry of Education, Govt. of India at Tezpur University |
| | Linguistic Imperialism, Linguistic Rights and NEP2020: A Translanguaging Perspective | International Symposium on Recent Theories in Linguistics and their Applications | 17-03-2021 to 18-03-2021 | Department of Linguistics, the Central University of Rajasthan |
| Bipasha Patgiri | Markedness and Naturalness in Phonology: Theory and Beyond | SEL for SEL | 9-10-2021 | Society for Endangered Languages |
| | Language and Linguistics: Perspectives from Sanskrit, Computation, AI and Beyond | BTech Induction Program | 12-11-2021 | School of Engineering, Tezpur University |
| Amalesh Gope | Introduction to Linguistics | Itol-2020 | 20-10-2021 | Department of English, in collaboration with the IQAC, Panskura Banamali College (Autonomous), Panskura, West Bengal, India |
| | The Horizons of Computational Linguistics: With Reference to Prosody and Image Processing | An Introduction to Computational Linguistics | 09-06-2021 | Department of Linguistics, Assam University, Silchar |

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| •••• | Number of Qualified Students | Academic Programme |
|----------|---------------------------------|---|
| NET/GATE | | MA in Linguistics and Language Technology |
| NET | 01 | MA in Linguistics and Language Technology |

| GATE 03 | MA in Linguistics and Language Technology |
|---------|---|
|---------|---|

Notable Placement of Students

| Name of | Academic Programme | Placement Designation | Company/ | Mode of |
|--------------|-----------------------|---------------------------|---------------------|------------|
| Student | | | Organization | Selection |
| Premananda | MA in Linguistics and | Google Ads Consultant | WNS Global Service | Off-Campus |
| Singha | Language Technology | | Pvt. Ltd, Gurgaon | |
| Plabita Bora | MA in Linguistics and | Asset Publishing and | Deloitte (India | Off-Campus |
| | Language Technology | Quality Assurance Analyst | Offices of the US), | _ |
| | | | Bangalore | |
| Pinaz | MA in Linguistics and | Editorial Head | Di Tech Publishing | Off-Campus |
| Sahina | Language Technology | | Services (HO: | _ |
| Ahmed | | | Mumbai), Guwahati | |
| Priyanshi | MA in Linguistics and | Linguistic Specialist | Capgemini | Off-campus |
| Adyapak | Language Technology | | | |

Enrollment of Students in other Institutes for Higher Studies

| Name of | Academic Programme | Name of other | Enrolled Academic |
|---------------|---|---------------|--------------------------|
| Student | | Institute | Programme |
| Pahi Gogoi | MA in Linguistics and Language Technology | IIT, Rupar | Ph.D. |
| Snigdha Medhi | MA in Linguistics and Language Technology | IIT, Mumbai | Ph.D. |

DEPARTMENT OF MASS COMMUNICATION AND JOURNALISM

About the Department

The Department of Mass Communication and Journalism offers a conducive learning environment driven by a passion for Media and Communication Studies. The Department is dedicated to the interdisciplinary understanding of communication in an increasingly networked society. As the technological advancement yields a social environment that is constantly changing and evolving, the MA Mass Communication and Journalism (MCJ) and MA Communication for Development (C4D) programmes equip the students with the recent developments in theory and practice while remaining true to the mission of emphasizing professional excellence along with social commitment.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|--|-----------------------------------|
| M.A in Mass Communication and Journalism | 44 |
| M.A in Communication For Development | 14 |
| Ph.D. | Variable (05 admitted in 2021-22) |

Thrust Research Areas of the Department

- Media, culture and society
- Political economy of media
- Communication for social change and development

Major Facilities/Equipment available

- 14 Apple computers with Final Cut Pro software for video editing
- TV studio with Panasonic P2 Camera (05 nos.)
- Sony DSR 570wspl Camera (02 nos.)
- Canon 5D Mark III (01 no.), Canon 1500D (05 Nos.)
- Teleprompter and other studio recording facilities
- 11 Nos. of Desktops with Sony Sound Forge with Pro Tools Console for audio editing
- 18 nos. of Windows Intel i7 Desktops with Quark Xpress and Adobe software for print media practical
- Screening hall
- Audio studio with existing equipment

Faculty Members

| Designation | Name | Highest | Specialization | <email></email> | Date of |
|-------------|--------------|-------------|----------------------------|-----------------|-------------|
| | | Qualificati | | @tezu.ernet.in | holding the |
| | | on | | | current |
| | | (Institute) | | | position |
| | Sunil Kanta | Ph.D. | Communication Theory and | Sunilkb | 16-01-2016 |
| | Behera | (Berhampur | Research, Gender and Media | behera_sunil@ | to |
| | | University) | | yahoo.com | 07-2021 |
| Professor | Abhijit Bora | Ph.D. | Radio, Development | abhijitb | 05-09-2016 |
| riojessoi | | (Gauhati | Communication, Science | | |
| | | University) | Communication, Journalism, | | |
| | | | Media Writing, | | |
| | | | Communication for | | |

| | | | Development | | |
|-----------|-------------|-------------|---------------------------------|---------------|------------|
| | Joya | Ph.D. | ICT for Development, | jc | 10-07-2018 |
| | Chakraborty | (University | Development Communication, | - | |
| | | of | Women, children and Media; | | |
| | | Hyderabad) | Community media. | | |
| | Р. | Ph.D. | Media Studies, Cultural and | anbu | 10-3-2005 |
| | Anbarasan | (JNU) | Film Studies | | |
| Associate | Uttam Kr. | Ph.D. | ICT Implications on Society, | uttamkp | 06-01-2017 |
| Professor | Pegu | (Jamia | Science Communication, Film | | |
| | (currently | Milia | Studies, Media Analysis | | |
| | on Lien) | Islamia) | | | |
| | Perosh | PhD | Film studies, photography | daimari | 03-11-2009 |
| | Jimmy | (TU) | | | |
| | Daimari | | | | |
| | Anjuman | PhD | Media and Children, | anjuman | 03-11-2009 |
| | Borah | (TU) | Children's Participation, | | |
| | | | Participatory Communication, | | |
| | | | Advertising and Public | | |
| | | | Relations | | |
| | Kapou | PhD | Media History, Political | kapou | 09-11-2009 |
| Assistant | Malakar | (TU) | Studies, International Studies, | | |
| Professor | | | Digital Media, Convergent | | |
| | | | Journalism | | |
| | Manoj | PhD | New Media Journalism, | manojdeori | 27-01-2017 |
| | Deori | (Berhampur | Multimedia Production, | | |
| | | University) | Media and Disaster | | |
| | | | Management, E-learning | | |
| | Junali Deka | PhD | Digital media and society, | junalid | 01-02-2017 |
| | Julian Deka | (Assam | cultural studies | Juliana | 01-02-2017 |
| | | University) | | | |
| | Mrinmoy | M.A in | Photography and New Media | mrin115@gmai | 01.02.2022 |
| Cuast | Burahogain | MCJ | | l.com | |
| Guest | Ankur | M. Phil | Advertising and PR, | ankurdutta318 | 25.01.2022 |
| Faculty | Protim | (Assam | photojournalism, | @gmail.com | |
| | Dutta | University) | Development communication | - | |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the |
|----------------------------|--------------------|-------------------------------|---------------------|
| | | | current position |
| Technical Officer | Ratul Chandra Nath | ratul | 03-09-2010 |
| Senior Technical Assistant | Chanchal Singha | chansan | 19-07-2011 |
| LDC | Bijoy Mech | bijoy | 28-08-2019 |
| MTS | Bubul Das | - | 16-08-2018 |

Consultancy Project

| Project Title | Funding | Amount | Duration | Investigator(s) |
|-------------------------|-------------|-------------------------|-------------------|-----------------|
| | Agency | (in INR) | | |
| Science and Technology, | Vigyan | 11 lakh (approx.) for | About three | Abhijit Bora |
| Communication and | Prasar | the first year (18 lakh | years since June, | (PI) |
| Popularization in | (Under DST, | annually from second | 2021 (Ongoing) | |
| Assamese (SCoPE – | Delhi) | year onwards) | | |

| Assamese) project | | | | |
|----------------------------|--------|---------|--------------|--------------|
| Experience sharing | UNICEF | 1618000 | 1-05-2021 to | Joya |
| documentation to reduce | | | 31-12-2021 | Chakraborty |
| flood related child death, | | | | (PI) |
| capacity building for | | | | Dr. Anjuman |
| strengthening and | | | | Borah, Co PI |
| integrating C4D | | | | |
| approaches in | | | | |
| Development Practice and | | | | |
| Pedagogy and promotion | | | | |
| of C-19 appropriate | | | | |
| behaviors and vaccine | | | | |

Research Projects (both Ongoing and New)

| Project Title | Funding Agency | Amount (in INR) | Duration | Investigator(s) |
|--|-------------------|--------------------|------------------------|---------------------|
| Historical Continuity and Cultural Connotations of the Mask Traditions of North East India | ICSSR | 9.7 Lakhs | 2 Years (2020-2022) | Joya Chakraborty |

Publications by Faculty Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Bora, A. (2022). Assamese Print Media and Freedom Struggle An Insight. *Communicator*. LVII (1): 53-59.
- Bora, Abhijit. (2021). New media and Vernacular Press : A Study on the Status of Online Vernacular Journalism in Assam. *Communicator*. LVI (1): 40-51.

Publication of Articles in Other Forms

- Bora, A. Autonomous College : Unfulfilled Objectives. *The Assam Tribune*, Guwahati, Assam, 03-02-2022
- Bhuyan K. (4th Semester, MCJ) article titled "ভাৰতৰ মহাকাশ যাত্ৰা" published in Sandhan, a Science Newsletter in Assamese by Vigyan Prasar. 2022
- Bhuyan K. (2nd Semester, MCJ) film review titled "Daai The World of an Artist", *Magical Assam.* 2021
- Bhuyan K. (4th Semester, MCJ) article titled 'Nine Hills And One Valley Paints A Picture Of Contemporary Manipur', *Film Companion*, 20-03-2022.
- Chandan Kumar Nath (3rd semester MA C4D), 'Sima Bibad Aru Rajniti', *Asom Barta*, 02-08-2021.
- Chandan Kumar Nath 3rd semester MA C4D), 'Chipe Sitare', *Jansatta*, 26-05-2021.

| Name of Faculty/ | Purpose of | Title of Event | Date/ | Organizer and |
|------------------|--------------------|--------------------------|------------|--------------------|
| Staff Member | Attending | | Period | Venue |
| Joya Chakraborty | Paper Presentation | International Conference | 12-07-2021 | IAMCR, Africa |
| | | | | (Online) |
| Anjuman Borah | Paper presentation | International Conference | 12-07-2021 | IAMCR, Africa |
| - | | | | (Online) |
| | Paper presentation | International Conference | 08-07-2021 | ICAN4 Delhi |
| Junali Deka | Paper presentation | National Seminar | 21-04-2022 | Mizoram University |

Conference/Workshop/Symposium/Seminar etc. Attended

| Name of | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|---------------------------------------|--|--|------------|--|
| Faculty Member | | | | |
| Sunil Kanta Behera | Journalists as peace makers and noble laureates | Discussion | 11-04-2021 | Department of MCJ, TU (Online) |
| Abhijit Bora | Re-thinking the role of DIPROs in the New Media Age | New technologies ND Mis-information, Dis- information in Public Relations (Training session for new recruits in Public Relations Dept. of Assam govt.) | 13-12-2021 | Relations Dept., Govt. of Assam, PWD Convention Centre, Ganeshguri, Guwahati |
| | Story-telling in Science Communication | Scientific Story-telling for new media and newspapers | 27-05-2022 | Institute of Advanced Study in Science and technology (IASST), Guwahati, Assam |
| Abhijit Bora and Manoj Deori | Consultation on various aspects of science communication | Consultation session on science communication | 25-11-2021 | Institute of Advanced Study in Science and technology (IASST), Guwahati, Assam |
| Joya Chakraborty | Media women and children | 3-day FDP Development Journalism | 27-02-2022 | UNICEF, West Bengal (Online) |
| | Reporting on women and Children | Students' workshop Development Journalism | 08-03-2022 | UNICEF, West Bengal (Online) |
| | Participatory Research in Communication | One-week FDP | 10-03-2022 | Adamas University, Kolkata (Online) |
| | Media women and children | Students' workshop Development Journalism | 16-03-2022 | UNICEF, Kolkata (Online) |
| | Media Women and Children | Students' workshop Development Journalism | 03-04-2022 | UNICEF, Kolkata (Online) |
| | Grounded Theory | Capacity Building Programme for faculty in social sciences | 30-08-2022 | Ambedkar Chair, Tezpur University (Online) |
| | Participatory Research | Capacity Building Programme for faculty in social sciences | 30-08-2022 | Ambedkar Chair, Tezpur University (online) |
| | MA C4D curricula in India | Seminar series on Media development curricula from around the world | 02-07-2021 | IAMCR Media sector Development working group, MAHE, Karnataka |
| | Challenges & Prospects for virtual pedagogy in Journalism and Mass Communication during COVID | Panel Discussion (IAMCR- Manipal Conclave 2021) | 14-07-2021 | IAMCR – Manipal, Karnataka |
| | Implications of national education | National Media Conclave 2021 | 22-11-2021 | Bhubaneswar, Odisha |

Invited Talk

| | policy for media and communication education in India | | | |
|------------------|---|---------------------------------------|------------|--|
| Anjuman Borah | Art of public speaking and presentation | Add on Course | 26-12-2021 | HPB Girls college, Department of Assamesse |
| Manoj Deori | Innovative pedagogy in Higher Education | Interdisciplinary Refresher Course | 07-12-2021 | TLC, Tezpur University |

Awards/Honours/Notable Achievements

| Name of | Designation of | Achievement | Event/Awarded by |
|------------------|------------------|---|-----------------------------|
| Awardee | Awardee | | |
| Joya Chakraborty | Faculty | Community based participatory research coordinator (North Eastern States) | Unnat Bharat Abhiyan 2.0 |
| Lohita Raulo | Research Scholar | ICSSR Doctoral Fellowship - 2021 | ICSSR |
| Harshwardhani | Research Scholar | Completed Estophilus scholarship | Tallinn University, Estonia |
| Sharma | | (Sept 2021- Feb 2022) | |

Other Significant Activities of the Department

- Webinar: On the theme 'Journalists as Peacemakers and Nobel Laureates' to mark the occasion of two Nobel Prize awarded to two renowned journalists. Speakers: Mr Samudra Gupta Kashyap, State information Commissioner, Guwahati and Dr. SK Behera, Professor of Eminence from the MCJ Dept. 11-10-2021.
- National Press Day: in association with the Information and Public Relations Department of Sonitpur district. Newsletter 'Fine Print' released. 16-11-2021.
- Webinar: On the topic 'The uncomfortable truth' was organized with Prof. Anup Kumar Talukdar of Gauhati University as part of the SCoPE-Assamese project. 05-10-2021.
- A state-level workshops on Science Communication under SCoPE-Assamese project held at Cotton University, Guwahati in collaboration with Mass Communication Department, TU. Resource persons: Science communicator Dr Dinesh Chandra Goswami and Dr Jayanta Kumar Sarma. 28-03-2022
- Street Plays at the University: By the students of MC600 Science Communication (Core course) of Semester IV of the department. On themes relating to health, hygiene, mental health etc. in keeping with the National Science Day observation on March 1, 2022.
- Special Lecture: On 'Circular Economy' as a part of the SCoPE-Assamese activities. Resource Person: Prof. Arup Kumar Mishra, Chairman, State Control Board, Assam, Guwahati. 16-03-2022.
- Interaction between students of the department and Dr Madhab Chandra Rajbongshi, Superintendent of Tezpur Medical College on the theme of "COVID19 pandemic and the medical profession a view from a frontline warrior." 16-03-2022.
- Six-day workshop on series of online lectures and digital workshop on Graphic Design for the students of MA C4D, with Dr. Atul Sinha being the resource person for the mentioned sessions. 13-11-2021 to18-11-2021.
- Series of online lectures and digital workshop on Puppetry for the students of MA MCJ and C4D. Resource Person: Ms Anurupa Roy, one of the most prominent puppeteers of India. Oct. 2021.

- Three-day workshop on "Stories, Meaning Making and Power" led by Raviraj Shetty, hailing from Kathmandu in India, and a prominent social activist in the mental health and wellness sector. 01-02-2022 to 03-02-2022.
- One-day workshop on Radio Broadcasting by RJ Manjuri and RJ Hansraj. 14-03-2022.

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|--------------------|
| NET | 3 | MCJ |
| | 1 | C4D |
| | 1 | Ph.D. |
| JRF | 1 | Ph.D. |

Notable Placement of Students

| Name of Student | Academic | Placement Designation | Company/ Organization | Mode of |
|-----------------|-----------|---------------------------|--------------------------|------------|
| | Programme | | | Selection |
| Rinku Pathak | Ph.D. | Corporate Communication | ONGC | Off Campus |
| Madhusmita | MCJ | Trainee Account Executive | Adfactors PR | On Campus |
| Bordoloi | | | | |
| Abhishek Kabra | MCJ | Trainee Account Executive | Adfactors PR, Power Grid | On campus |
| Simanta Barman | MCJ | Trainee Account Executive | Adfactors PR | On Campus |
| Neetumoni Das | C4D | Field executive | Contact Base | Off Campus |
| Kaveri Saikia | C4D | Field executive | Contact Base | Off Campus |
| Kangkana Devi | C4D | Fellow | Gandhi Fellowship | Off Campus |
| Arifa Begum | C4D | Executive | SeSTA | Off Campus |
| Samagnee Baruah | MCJ | Assistant Professor | Dibrugarh University | Off Campus |
| Sangita Kalita | C4D | Communication Specialist | Insight Brandcom | Off Campus |
| Gitartha Bhuyan | C4D | Executive Trainee | SeSTA | On Campus |
| Trishna Baruah | C4D | Executive Trainee | SeSTA | On Campus |
| Pratibha | MCJ | Analyst | IPAC | On Campus |
| Bhattacharjee | | | | |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic Programme | Name of other Institute | Enrolled Academic |
|-----------------|--------------------|-------------------------|-------------------|
| | | | Programme |
| Seuj Sajib Nath | M.A MCJ | JNU | Ph.D. |

DEPARTMENT OF SOCIAL WORK

About the Department

The Department of Social Work, Tezpur University was established in 2014 to respond to the dearth of good Social Work schools and trained social work professionals in the North East Region (NER) of India. The Department follows a rigorous theoretical and field-based pedagogy with special focus on the issues of the NER. The Department offers Masters and Ph.D. programme in Social Work.

Academic Programmes and Student Intake

| Academic Programme | Intake |
|--------------------|-----------------------------------|
| M.A. Social Work | 22 |
| Ph.D. | Variable (admitted 02 in 2021-22) |

Thrust Research Areas of the Department

- Social Entrepreneurship and Livelihood promotion
- Gender and Social Work
- Public health and Mental Health
- Environment, Ecology and Social Work

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------------|----------------------------|--|---|------------------------------------|---|
| Professor | Chandan Kumar Sharma | Ph.D. (Delhi University) | Development; Environment; Urbanisation; Agrarian Structure; Social Movements; Ethnicity; Migration; Culture; Society and Politics of Northeastern India. | chandan | 11-08-2010 |
| Assistant Professor | Apurba Saha | Ph.D. (National Institute of Mental Health and Neuro Sciences, NIMHANS) | Mental Health and Social Work | apurbasaha | 04-07-2014 |
| | Rajesh Kalrivayil | Ph.D. (JNU) | Science, Technology and Innovation Studies | rajeshk | 27-10-2014 |
| | Samhita Barooah | Ph.D. (TISS, Guwahati) | Ecology, Social Work Practice, Gender, Social Entrepreneurship | samhitab | 15-11-2021 |
| | Namami Sharma | Ph.D. (Delhi University) | Environment and Social Work, Community Organisation | namamis | 09-01-2017 |
| | Prerana Banik | M.Phil (TISS, Mumbai) | Gender and Livelihood | banikpb | 02-02-2017 |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the current position |
|-------------|---------------|-------------------------------|--------------------------------------|
| Assistant | Kiran Mahalia | kiran | 02-08-2018 |
| MTS | Gunadhar Bora | | 29-07-2015 |

Research Projects (both Ongoing and New)

| Project Title | Funding Agency | Amount (in INR) | Duration | Investigator(s) |
|--|--|--------------------|--------------------------------------|--|
| Substance Abuse and Suicidal Behavior among college Students in North East India | ICMR | 28,24,500 | 18 months (1-07-2021 onwards) | Apurba Saha (PI) Prof. Nilratan Roy (CoPI) |
| Nasha Mukta Bharat Abhiyaan: A Step to Build Abstemious Society through Community Intervention and Promoting Healthy Habits | Ministry of Social Justice and Empowerment, Govt. of India | 18,95,250 | 10 months (01-11-2021 onwards) | Apurba Saha (PI) Chandan Sharma (CoPI) Amiya Das (CoPI) |
| Nutrition and Community Action Resource Centre | UNICEF and POSHAN Abhiyaan , Govt. of Assam | 98,83,400 | Continuing 1-03-2021- | Chandan Sharma (PI) Rajesh Kalarivayil (Co-PI) Namami Sharma (Co-PI) |

Publications by Faculty and Staff Members Publication of Articles in LICC CARE Listed Crown L/Crow

Publication of Articles in UGC-CARE Listed Group I/Group II Journals Bora D., Deuri S. P. & Saha A. (2021). Psychiatric Social Work Intervention with a Woman with

 Bora D., Deuri S. P. & Saha A. (2021). Psychiatric Social Work Intervention with a Woman with Depression: A Case Report from Assam. *International Journal of Indian Psychology*, 9(2): 1015-102

Publication of Articles in Other Forms

- Barooah S. 'Matrilineal Societies and Contemporary Realities in Meghalaya', magazine sanghaditha.com,
 - September 1, 2021. https://www.sanghaditha.com/meghalayile-mathrudayaga/
- Barooah S. 'Feminism needs government support in hours of crisis', The Leaflet, E-Magazine, July 16, 2021,

https://theleaflet.in/feminism-needs-government-support-in-hours-of-crisis/

- Barooah S. 'Trans troll by media', E-Magazine: Medium, July 20, 2021, https://medium.com/@samhitaworld/trans-trolls-by-media-ec9c9306ede8
- Barooah S. 'Queer Ecology of Borders', E-Magazine: Medium, July 29, 2021, https://medium.com/@samhitaworld/queer-ecology-of-borders-5c4e046934f4
- Barooah S. 'Pride Month in Prejudiced Assam', E-Magazine: Medium, July 24, 2021, https://medium.com/@samhitaworld/pride-month-in-prejudiced-assam-60aadf12b22c
- Barooah S. 'Through the non-binary lens', E-Magazine: Medium, July 19, 2021, https://medium.com/@samhitaworld/through-the-non-binary-lens-9987cb96572f
- Barooah S. 'A in the LGBTQIAPK spectrum', E-Magazine: Medium, July 20, 2021, https://medium.com/@samhitaworld/a-in-the-lgbtqiapk-spectrum-9624f165bec4

• Barooah S. 'Cultural Gaze at Women in Public Sphere,' E-Magazine: Medium, September 19, 2021,

https://medium.com/@samhitaworld/cultural-gaze-at-women-in-public-sphere-4056c1360638

- Barooah S. 'Collective Ecosystem Restoration,' Newspaper: Arunachal Times, June 7, 2021, https://arunachaltimes.in/index.php/2021/06/07/collective-ecosystem-restoration/
- Barooah S. 'Palm Oil Invasion of North East India,' Newspaper: The Morung Express, October 6, 2021,

https://morungexpress.com/palm-oil-invasion-of-north-east-india

• Barooah S. 'Decolonised Democracy', Newspaper: The Shillong Times, April 6, 2021, https://theshillongtimes.com/2021/04/06/decolonised-democracy/

| Name of Faculty/ Staff Member | Purpose of Attending | Title of Event | Date/ Period | Organizer and Venue |
|--|--|---|-----------------|--|
| Rajesh Kalarivayil | Paper Presentation | Social Life of Care' conference | 14-05-2021 | Centre for Research in the Arts, Social Sciences and Humanities, University of Cambridge (Online) |
| Samhita Barooah | Photo essay presentation on Redefining Citizenship through the streets and public sphere, photo journey from Lataxil, Shaheen Bagh to Guwahati Queer Pride. | State, Community and Gender, Perspectives and Practices | 16-03-2022 | Department of Sociology, Tezpur University |

Conference/Workshop/Symposium/Seminar etc. Attended

Invited Talk

| Name of | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|---------|------------------------|--------------------------------|-------------|------------------------|
| Faculty | | | | - |
| Member | | | | |
| Samhita | Queerness, Ecology | Online 10th ID Refresher | 17-03-2022 | UGC HRD Center |
| Barooah | and Livelihoods | Course on Child Development | | Gauhati University |
| | during Pandemic | Women's Issues and Gender | | |
| | Times | Sensitization | | |
| | Gender Diversity in | -do- | 12-03-2022 | -do- |
| | Public Sphere | | | |
| | Gender Sensitive | Conversation Meet online | 09-12-2021 | Foundation for Social |
| | Education Campus: | | | Transformation, |
| | Understanding from | | | Guwahati, Assam |
| | queer lenses | | | |
| | Gender Based | Online orientation programme | 05-01-2022 | NIPCCD, Ministry of |
| | Violence Social | for combating violence against | | Women and Child |
| | Construct of Gender | women and girls for | | Development, Regional |
| | and it's implications- | college/university teachers. | | Center Mohali, Punjab, |
| | Causes and | | | India. |
| | Consequences. | | | |
| | Gender at Work | Webinar | 25-01-2022 | Gender Sensitisation |
| | across virtual and | | | Cell, Royal Global |
| | physical spaces | | | University, Guwahati |
| Namami | Building Village | Capacity Building of Women | 29-11-21 to | Pabhoi Greens in |

| Sharma | Institutions | Farmers on Sustainable | 01-12-21 | collaboration with |
|--------|--------------|------------------------|----------|--------------------|
| | | Agricultural Practices | | UNDP, Khonoma, |
| | | | | Nagaland |

Other Significant Activities of the Department

- The World AIDS Day Observation, 01-12-2021:
 - Awareness programme on HIV-AIDS in the TU campus
 - Discussion with People Living with HIV (PLHIV) and members of the NGO "SNEH" working with PLHIVs.
 - A webinar was organised titled "Visual Journey of PLHIV: an ethnographic account and contemporary post covid realities of PLHIV "
- Webinar: "The socio legal perspectives of human dignity of survivors of rape, forced child marriage and domestic violence", 24-11-2021.
- Webinar: "Witch Persecution/Hunting in Indigenous Societies in India", 09-12-2021.
- Public Lecture: By Brinelle Dsouza on "Right to Healthcare and Collective Action : Experiences from the field", 17-12-2021.
- Panel discussion: "Gender queer awareness", 08-12-2021.
- Interactive Session: With Mr. Pranab Doley, the Indigenous Rights Activist and Ms. Devyani Borkataki on "Ecology and Militarisation: An Emic Perspective", 10-12-2021.
- Interactive Session: With Mr. Armaan Ali, Executive Director, National Centre for Promotion of Employment of Person with Disability, 06-12-2021.
- The International Women's Day Observation: In collaboration with the Department of Mass Communication and Journalism, 08-03-2022.
- World Social Work Day Observation: Renown social activist Medha Patkar gave a public lecture. Members of local NGOs participated in the programme.

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|--------------------|
| NET | 1 | M.A. Social Work |

Notable Placement of Students

| Name of Student | Academic | Placement Designation | Company/ | Mode of |
|-------------------|------------------|------------------------|--------------------|------------|
| | Programme | | Organization | Selection |
| Sarmistha Agasthi | M.A. Social Work | Gandhi Fellow | Piramal | On- Campus |
| | | | Foundation | |
| Barsha Barua | M.A. Social Work | Project Coordinator | Evangelical Social | Off Campus |
| | | | Action Forum | _ |
| Tonaya Borah | M.A. Social Work | Project Assistant | NCARe, Tezpur | Off Campus |
| | | (Knowledge Management) | University | _ |
| Jnandeep Mahanta | M.A. Social Work | CDPO | Govt. of Assam | Off Campus |

Enrollment of Students in other Institutes for Higher Studies

| | Academic Programme | Name of other Institute | Enrolled Academic |
|--------------|--------------------|---------------------------|-------------------|
| Student | | | Programme |
| Charmi Haque | M.A. Social Work | Assam University, Silchar | Ph.D. |

DEPARTMENT OF SOCIOLOGY

About the Department

The Department of Sociology at Tezpur University was established in 2006 with a Master's program. Subsequently, it launched a PhD program in 2008. The department is dedicated to creating competent and socially sensitive graduates through rigorous teaching/training programs and extension activities. The curriculum emphasizes the teaching and learning of general concerns of sociology as well as the issues of sociological significance in northeastern India, which are a special focus of the teaching and research of the department. A combination of participatory, experiential and creative pedagogy is used for transacting the curricula to foster dialogue, mutual learning and critical reflection. The pedagogical practices also utilize an interdisciplinary framework combining classical approaches in conjunction with emerging areas of research. The students pursuing their Masters in the department not only have to learn critical approaches and perspectives in the classroom but are also encouraged to participate in short field visits during vacations as part of their mandatory research projects. The department also takes care to expose the students to the prevailing social realities through activities such as outreach programs, regular film screenings, seminars and other programs in collaboration with other social organizations. The faculty members of the department have a wide range of interests and expertise and are currently engaged in research in areas such as Development, Education, Environment, Ethnic Conflicts, Governance, Health, Migration, Social Movements, Science Studies and so on.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|--------------------|-----------------------------------|
| MA in Sociology | 38 |
| Ph.D. in Sociology | Variable (admitted 04 in 2021-22) |

Thrust Research Areas of the Department

- Sociology of Northeast India
- Migration
- Identity Politics
- Public Health
- Sociology of Education
- Land Relations
- Sociology of Development
- Gender Studies
- Environmental Sociology

Major Facilities/Equipment available

- Smart Class Room
- Air Conditioned Research Scholar's Room
- Book Club cum Reading Room

Faculty Members

| Designation | Qualification (Institute) | | Qualification (Institute) | | Qualification (Institute) @tezu.ern | | Date of holding the current position |
|------------------------|------------------------------|--|--|-----------|--|--|---|
| | Chandan Kumar Sharma | Ph.D. (University of Delhi) | Development, Environment, Identity Politics, etc. | chandan | 11-08-2010 | | |
| Professor | Rabin Deka | Ph.D. (Dibrugarh University) | Social Movements, Social Exclusion, Agrarian Studies | rdeka | 01-12-2015 | | |
| | Kedilezo Kikhi | Ph.D. (NEHU) | Sociology of Development, Sociology of Northeast India, Tribal Studies | kedi | 02-11-2015 | | |
| Associate Professor | Amiya Kumar Das | Ph.D. (TU) | Sociology of Governance, Sociology of Health and Illness Research Methodology | amiyadas | 18-11-2019 | | |
| | Sumesh, S.S. | Ph.D. (University of Kerala) | Body, Gender and Sexuality, Masculinity studies, Identity and Exclusion | sumesh | 01-12-2009 | | |
| | Nirmali Goswami | Ph.D. (IIT Kanpur) | Identity Politics and Education, Gender Politics, Language Ideologies | nirmalig | 14-12-2009 | | |
| Assistant | Sarmistha Das | Ph.D. (TU) | Agrarian Studies, Kinship Studies, Land and Livelihood | sarmistha | 19-08-2010 | | |
| Professor | Subhadeepta Ray | Ph.D. (University of Delhi) | Sociology of Science. Sociology of Anthropocene Sociology of Knowledge | sray | 24-02-2014 | | |
| | A.S. Shimreiwung | Ph.D. (JNU) | Sociology of Mass Media, Sociology of Religion, Northeast India Studies | shim | 04-07-2014 | | |
| | Pamidi Hagjer | Ph.D. (Gauhati University) | Ritual Studies, Kinship Studies, Industrial Sociology | pamidi | 06-04-2017 | | |
| Guest Faculty | Minakshi Sarmah | M.A. (Griffith University, Australia) | International Relations (Research) | msarmah | 2017 | | |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the |
|----------------------|-------------------|-------------------------------|---------------------|
| | | | current position |
| Upper Division Clerk | Amarjyoti Bharali | amar | 2009 |
| MTS | Jogen Das | jogen | 1996 |

Publications by Faculty and Staff Members Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Hazarika, B. O. & Das, S. (2021) Paid and unpaid work during the Covid-19 pandemic: A study of the gendered division of domestic responsibilities during lockdown. *Journal of Gender Studies*, 30(4):429-239
- Hagjer, P. (2022).Dimasa Rituals of Death and Mourning in Contemporary Assam . *Religions*, 13(1),82: DOI: https://doi.org/10.3390/rel13010082.
- Bhuyan, N. & Goswami N. (2022). Of Sankardeva, Sanskrit and Saraswati: The Interplay of the Regional and the National Symbols in a School in Assam. *Contemporary Education Dialogue*. 9(1):16-36
- Goswami, N. (2021). Mother-Work and School Culture: Parenting Strategies in Banaras. *Explorations*, ISS e-journal, 5 (2):29-47

Publication of Book Chapters

- Das, Amiya Kumar, (2021). "Informal Political Networks, Dalals and Local Governance in Assam" in G. Amarjit Sharma (Ed) *State vs. Society in Northeast India: History, Politics and the Everyday*, New Delhi, Sage, pp. 275-292., ISBN- 978-9-391-370-657
- Das, Amiya Kumar, (2021). "Interrogating Dalit Capitalism in the Neoliberal Era: Illusion or Reality" in R. Thirunavukkarasu (Ed) *Social Hegemony in Contemporary India*, New Delhi, Sage pp. 57-82., ISBN-978-9-353-886-332
- Goswami, N. (2021). 'Assamese and its 'others': Making of a school language in a multilingual society' In Kedilezo Kikhi, Amiya Kr Das and Piyashi Dutta (Eds.) *Indigeneity, Citizenship and the State: Perspectives from India's Northeast*, pages 186-207, ISBN: 9789350027257 Akar, New Delhi:

Publication of Articles in Other Forms

• A. S. Shimreiwung, "Why Development Cannot Climb Hills?", *Ukhrul Times*, (Online News Portal)

https://ukhrultimes.com/why-development-cannot-climb-hills/

| Name of Faculty/Staff Member | Purpose of Attending | Title of Event | Date/ Period | Organizer and Venue |
|------------------------------------|-------------------------|---------------------------------------|-----------------|---|
| A. S. Shimreiwung | Chair | Folk Traditions and Forms in India | 11-03-2022 | Department of English, Jamia Millia Islamia (Online) |

Conference/Workshop/Symposium/Seminar etc. Attended

Invited Talk

| Name of Faculty Member | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|------------------------------|--|--|------------|---|
| Sarmistha Das | Issues in Development | Issues in Development | | Department of Mass Communication and Journalism, Tezpur University |
| A. S. Shimreiwung | Tangkhul Society and Electoral Politics | Tangkhul Society and Electoral Politics | 19-02-2022 | Tangkhul Scholars Association (Online) |

| Nirmali | Reflexivity in | Refresher Course on | 09-12-2021 | UGC HRDC, |
|---------|------------------------|-------------------------|------------|---------------------|
| Goswami | examining languages in | Shifting paradigms in | | Harisingh Gour |
| | educational settings | social science research | | Vishwavidyalaya, MP |
| Nirmali | Going beyond the | Conversations, | 28-08-2021 | Department of |
| Goswami | binary of home and | Departmental seminar | | Political Science, |
| | school: Language and | _ | | Gauhati University |
| | politics in the South | | | |
| | Asian context | | | |
| Nirmali | Impact of Covid 19 on | Webinar on Impact of | 02-07-2021 | Department of |
| Goswami | Education: The | Covid 19 on Education: | | Sociology, Model |
| | Northeast Context | The Northeast Context | | college, Kaziranga, |
| | | | | Assam |

Other Significant Activities of the Department

- Seminar on 'Citizenship, State and Society in Contemporary Times' in Collaboration with Centre for Public Policy and Research, 14-03-2022.
- National Seminar on 'State, Community and Gender: Frameworks and Practices in South Asia', 15-03-2022 & 16-03-2022.
- Outreach Activities on the occasion of International Women's Day which includes Solidarity Walk, Gender Sensitisation and Awareness Session at Napam MV School with NRHM staff, and a skit on the theme of 'A step towards inclusivity' by the students, 08-03-2022.

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|-----------------------------------|------------------------------|------------------------------|
| UGC NET | 2 | MA Sociology & PhD Sociology |
| UGC-JRF | 1 | PhD Sociology |

| Name of | Academic | Placement | Company/ Organization | Mode of |
|----------------|--------------|-----------------|-----------------------------------|------------|
| Student | Programme | Designation | | Selection |
| Dimpi Sonowal | MA Sociology | Faculty | DHSK College | Off Campus |
| Bipasa Sonowal | MA Sociology | Faculty | Salt Brook Academy | Off Campus |
| Deepshikha | MA Sociology | Faculty | Dr. Radhakrishnan School of Arts, | Off Campus |
| Ahom | | | Commerce and Science | |
| Iona | MA Sociology | Fellowship | Teach For India | Off Campus |
| Bhattacharya | | | | |
| Prativa Brahma | MA Sociology | Operations | Masai School, Bengalaru | Off Campus |
| | | Manager | | |
| Kankana | MA Sociology | Program Manager | Delhi Skill and Entrepreneurship | Off Campus |
| Talukdar | | | University, New Delhi | |
| Darathi Kalita | MA Sociology | Teacher | Maria School, Guwahati | Off Campus |
| Dumisani | MA Sociology | Monitoring, | Nutrition Action Zimbabwe | Off Campus |
| Nhliziyo | | Evaluation | | |
| - | | Accountability | | |
| | | and Learning | | |
| | | Officer | | |

Notable Placement of Students

CHANDRAPRABHA SAIKIANI CENTRE FOR WOMEN STUDIES

About the Centre

Chandraprabha Saikiani Centre for Women Studies entails the journey of women studies at Tezpur University. The establishment of this new subject, 'Women Studies,' has been a new identity within the existing disciplines. Women Studies is a self-conscious determination to show that both the form and the content of the existing knowledge is related to the unequal distribution of social power between men and women. North–east India, being a region of diversities, positions women differently in terms of race, class, ethnicity and sexuality. This politics of difference is a major proposition in the current times as it calls into question ideas of immediate and transparent personal experience and face-to-face community interaction. At present, the centre has a fundamental obligation of disseminating women studies and scholarship and also to be an active participant in politically oriented dialogue. It is our pleasure to record our sincere gratitude to the University for its unstinted support at every stage of its evolution and development.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|-----------------------------|-----------------------------------|
| PG Diploma in Women Studies | 20 |
| Ph.D. | Variable (admitted 03 in 2021-22) |

Thrust Research Areas of the Centre

- Gender Studies
- Performance Research
- Gender and Mental Health
- Anthropology and Cultural Studies
- Women and Folklore

Major Facilities/Equipment available

- Desktop
- Laptop
- Furniture
- MMP

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|-------------|----------------------|---|----------------------|------------------------------------|--------------------------------------|
| | Madhurima Goswami | Ph.D. (TU) | Culture and Religion | mgs | 04-02-2014 |
| J | Mousumi Mahanta | Ph.D. (TU) | Mental Health | mousumi | 20-07-2015 |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the current position | |
|------------------------|-----------------|-------------------------------|--------------------------------------|--|
| Data Entry Operator | Pranjal Sharma | pranjal | 19-03-2014 | |
| Professional Assistant | Abhijit Baishya | abhi | 19-11-2015 | |

| Research Associate | Dr. Ivy Daimary | ivy2 | 09-08-2016 |
|--------------------|-----------------|--------|------------|
| MTS | Malati Boro | malati | 29-01-2016 |

Research Projects (both Ongoing and New)

| Project Title | Funding Agency | Amount | Duration | Investigator(s) |
|------------------------------------|------------------------------|----------|----------|-----------------|
| | | (in INR) | | |
| Lives of the Ritual Priestesses of | Indian Council of Historical | 2.5 | 2 Years | Madhurima |
| Assam: A Study with special | Research (ICHR), New Delhi | Lakhs | (2021- | Goswami |
| reference to the Institution of | | | 23) | |
| Doudinis in the Bodo Society. | | | | |
| Gender Advancement for | Gender Advancement for | 8 Lakhs | 2 Years | Madhurima |
| Transforming Institutions (GATI) | Transforming Institutions | | (2021- | Goswami |
| | (GATI) | | 23) | |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

• Sharma, P. Goswami, M. (2021), Un-Accounted Violence: Women Domestic Workers during Covid-19 Funding, *International Journal of Social Sciences*, Vol.10 (02): 2 -9

Publication of Book Chapters

• Goswami, M. (2022), Women Trafficking: Subtle lying challenge towards building equity, In Kikhi K. and Gautam D.R., *Comprehending Equity*, pages 137-147, ISBN:978-1-032-23411-3,Routledge:London & New York.

Invited Talk

| Name of Faculty Title of the Tall | | Title of the Event | Date | Organizer and Venue |
|-------------------------------------|--------------|---------------------|------------|---------------------------|
| Member | | | | |
| Mousumi | Child Sexual | National Girl Child | 24-01-2022 | SAED Solution Private |
| Mahanta | Abuse | Day | | Limited, Barpeta (Online) |

Other Significant Activities of the Centre

- UN International Fortnight to Resist Violence against Women and Girls Observation: on the theme Orange the world: End Violence against Women now, 25-11-2021 to 10-12-2021.
- Outreach Programme: Legal Awareness Programme at Borbil, Tezpur, 15-03-2022.
- Dr. Mousumi Mahanta was invited as a guest of honour by the Prajapita Brahma Kumaris Ishwariya Vishwa Vidyalaya, Ketekibari Centre in International Women's Day celebration, 13-03-2022.
- Outreach Programme: Meeting with village elders on *Empowerment through the intervention of technology* at Borbil village, Sonitpur district, 09-02-2022.
- The Centre with its endeavour to connect with the community womenfolk, participated in "The Observation of Women's Day by Jeuti Mahila Samiti", Nappam village, Tezpur, Sonitpur district, Assam, 08-03-2022.

DR. AMBEDKAR CHAIR

About the Chair

Dr. Ambedkar Chair, Tezpur University, was established by Dr. Ambedkar Foundation, Ministry of Social Justice and Empowerment, New Delhi, in 2016, to serve as a core centre for North East India, to further the ideals and philosophy of Dr. B. R. Ambedkar and the emancipation of the disadvantaged sections of society. The thrust area of the Chair is to conduct research on issues related to underprivileged communities in North East India with particular emphasis on their marginalisation, development and participation. The Chair was set up with the following objectives:

- Teaching and research
- Building a library
- Conducting research projects
- Organising public lectures
- Conducting awareness and skill development programmes

Thrust Research Areas

Issues Related to Disadvantaged Communities in the Context of NER (Marginalization, Development and Participation)

Major Facilities/Equipment available

- Room No. 299H (HSS Building)
- Two Desktop and a printer
- Five set of attached school desk and chair
- 5-seater sofa set with center table
- Office desk and chairs

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|-------------|----------------|--------------------------------------|----------------|------------------------------------|---|
| Professor | Kedilezo Kikhi | Ph.D. (NEHU) | Sociology | kedi | 18-04-2017 |

Officers and Staff Members

| Designation Name | | <email>@tezu.ernet.in</email> | Date of holding the |
|------------------|-----------------------|-------------------------------|---------------------|
| | | | current position |
| Research Officer | Dharma Rakshit Gautam | dgautam | 13-11-2017 |

Research Projects (both Ongoing and New)

| Project Title | Funding Agency | Amount (in INR) | Duration | Investigator(s) |
|--|-----------------------|--------------------|----------------------|----------------------------|
| Annotated Bibliography on Scheduled Castes and Scheduled Tribes in Social Sciences | DAF, MSJ&E, GOI | 3.75 Lakh | 4 years (2018-22) | K. Kikhi & D. R. Gautam |
| An Evaluation of Micro Finance Schemes of NBCFDC in the State of Assam | NBCFDC, MSJ&E, GOI | 4.37 Lakh | 1 Year (2021-22) | K. Kikhi & D. R. Gautam |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Kikhi, K. & Hibo, Visakhonö (2021-22). *Khitosbo*: The Legendary Wild Pear Tree at Makhel. *Journal on Frontier Studies*. 8: 12-16.
- Gautam, D. R. (2022). In the Name of Living with Virus: Enforcement of (Hidden) Agenda to Throttle Idea of Inclusive Education and Development. *Contemporary Voice of Dalit*, 14(1): 103–109.

Publication of Books

- Kikhi, K. & Gautam, D.R. (Eds.). (2021). *Comprehending Equity: Contextualising India's North-East.* Routledge India, New Delhi
- Kikhi, K., Das, Kumar, A. & Dutta, P. (Eds.). (2021). *Indigeneity, Citizenship, and the State: Perspectives from India's Northeast.* Aakar Books, Delhi.
- Kikhi, K. & Jose, K. SVD (Eds.). (2021). *Nagaland Vibrant Ethnic Communities in Transition: Culture, Festival, Customary Laws (Vol II)*. DVS Publishers, Delhi.
- Jose, K. SVD & Kikhi, K. (Eds.). (2021). *Nagaland Vibrant Ethnic Communities in Transition: Land, People, Livelihood (Vol I)*. DVS Publishers, Delhi.

Publication of Book Chapters

- Kikhi, K. & Gautam, D.R. (2021). Introduction: Equity and Differing Contexts in North-East India. Kikhi, K. & Gautam, D.R. (Eds.), In *Comprehending Equity: Context of North-East India*, pages 1- 20. Routledge India, New Delhi.
- Kikhi, K., Das, Amiya Kumar & Dutta, Piyashi. (2021). Introduction: Indigeneity, Citizenship and the State. Kikhi, K., Kumar Das, A. & Dutta, P. (Eds.), In *Indigeneity, Citizenship, and the State: Perspectives from India's Northeast*, pages 13-32. Aakar Books. Delhi.
- Kikhi, K. & Ghosh, Jagritee. (2021). Land Rights, Identity and Customary Laws amidst Angami and Konyak Nagas: A Comparative Cross-Referencing. Kikhi, K., Kumar Das, A. & Dutta, P. (Eds.), In *Indigeneity, Citizenship, and the State: Perspectives from India's* Northeast, pages 172-186. Aakar Books, Delhi.
- Kikhi, Kedilezo & Husca, A. (2021). Insight on Unique Heritages and Traditions of Sumi Nagas. Kikhi, K. & K. Jose SVD (Eds.), In *Nagaland - Vibrant Ethnic Communities in Transition: Culture, Festival, Customary Laws (Vol 2),* pages 80-97. DVS Publishers, Delhi.
- Jose, K. SVD & Kikhi, Kedilezo. (2021). Introduction: The Land and People. K. Jose SVD & Kikhi, K. (Eds.), In *Nagaland Vibrant Ethnic Communities in Transition: Land, People, Livelihood (Vol 1)*, pages. 1-12. DVS Publishers, Delhi.
- Kikhi, Kedilezo & Kikhi, Chozule. (2021). Livelihood and Resources: Naga Women as Natural Managers and preservers of Eco-Biodiversity. K. Jose SVD & Kikhi, K. (Eds.), In *Nagaland Vibrant Ethnic Communities in Transition: Land, People, Livelihood (Vol 1)* (pp. 36-52). DVS Publishers, Delhi.
- Jose, K. SVD & Kikhi, Kedilezo. (2021). Vibrant Ethnic Communities and Modernization of Traditions. K. Jose SVD & Kikhi, K. (Eds.), In *Nagaland Vibrant Ethnic Communities in Transition: Land, People, Livelihood (Vol 1)*, pages 142-158. DVS Publishers, Delhi.

| Name of | Purpose of | Title of Event | Date/Period | Organizer and Venue |
|--------------------------|--|---|--------------------------------|--|
| Faculty/ Staff Member | Attending | | | |
| Member | Panel Speaker Keynote Speaker | Webinar on the occasion of Janjati Gaurav Divas Webinar on Gender Parity in Contemporary India: A Sociological Perspective | 15-11-2021 02-10-2021 | Tezpur University (Online) Department of Sociology, Eastern Christian College, |
| Resource Person | | Two-day National Level workshop on Research Methodology, Writing and Publication | 11-11-2021 to 12-12-2021 | Dimapur (Online) Sazolie College, Jotsoma (Kohima) (Online) |
| Kedilezo Kikhi | Resource Person | ICSSR sponsored Online Capacity Building Programme (CBP) for Faculty Members of Social Sciences Belonging to the Disadvantaged Sections | 04-09-2021 | Dr. Ambedkar Chair, Tezpur University (Online) |
| | Resource Person | Online Faculty Development Programme on Covid 19 and Research Areas: Approaches for Humanities and Social Sciences | 12-07-2021 to 18-07-2021 | Faculty of Humanities and Social Sciences in Collaboration with IQAC, Assam down town University, Guwahati (Online) |

Conference/Workshop/Symposium/Seminar etc. Attended

Other Significant Activities of the Chair

- Lecture Series: *Dr. Ambedkar Memorial Lecture Series (Eight Lecture)* on the theme *Dr. B.R. Ambedkar and the Radical Dalit Self* delivered by Prof. Raj Kumar, Department of English, University of Delhi, 21-03-2022.
- Lecture Series: *Dr. Ambedkar Memorial Lecture Series (Seventh Lecture)* on the theme *Ambedkar's Vision of Democracy* delivered by Prof. Debi Chatterjee, (Superannuated) Jadavpur University on the occasion of 66th Mahaparinirvana Diwas of Babasaheb Dr. B.R. Ambedkar as part of Azadi Ka Amrit Mahotsav Initiative of MSJ&E, GOI, 06-12-2021.
- Lecture: Public Lecture on *A Reflection on the Indian Constitution and Contribution of B.R.* Ambedkar delivered by Dr. C.J. Thomas, Former Deputy Director, ICSSR NERC on the occasion of 72nd Constitution Day Celebration as part of Azadi Ka Amrit Mahotsav Initiative of MSJ&E, GOI, 26-11-2021.
- Capacity Building Programme: ICSSR New Delhi sponsored Capacity Building Programme (CBP) for Social Science Faculty Members Belonging to the Disadvantaged Sections, 23-08-2021 04-09-2021.
- Outreach Programme: Organized Drawing Competition at M.V. Napaam School on the Occasion of 72nd Constitution Day Two Level: Level 1 (Class 1-5) Theme: Indian Constitution Day & Level 2 (Class 6-8) Theme: Constitution & India of My Dreams, 26-11-2021.

REPORT OF THE DEAN, SCHOOL OF MANAGEMENT SCIENCES

The School of Management Sciences comprises the department of Business Administration, department of Commerce, Centre for Disaster Management and Intellectual Property Rights Cell. The school showed great resilience during the post covid period gearing up its activities and standing up to fulfil the needs of the stakeholders. Along with focusing on the quality of teaching and learning, it endeavoured to maintain the psychological wellbeing of the students and attracting the recruiters. The departments, Centre and cell, tried to be more flexible and adopted the blended mode of teaching and learning.

Prof. Pritam Deb, Chair Professor of Intellectual Property Rights Cell, brought laurels to the School and the University by being conferred Visitor's (President of India) Award for the year 2020 for developing two-dimensional heterostructure based biodegradable film for food packaging.

The student Invention, namely, Battery less electrochemical sensor for quantification, removal of naringin and determination of maturity of citrus fruits, was awarded SRISTI - Gandhi Young Technological Innovation (GYTI) Award-2021.

The department of Business Administration started a new programme, Executive Masters in Business Administration, for working executives during this period.

The school carried out 3 research-based projects during this period namely, UGC SAP DRS II on Livelihood through Tourism; UGC STRIDE project on Reviving cultural artefact Gamosa through Intellectual Property Management in Assam and Innovative supply chain; ICSSR-IMPRESS funded research project on Forensic Accounting Education in India: Prospects and Problems, and some consultancy projects notable among them were for UNICEF, Ministry of Rural Development and Govt. of Assam.

9 patents were applied through the IPR Cell, 5 were published and 1 was granted. 1 design was also granted during this period. There were 5 technology transfers. The IPR Cell signed MoU with Gujrat National Law University.

The school produced 6 best paper awards, 15 journal papers, 1 book and 7 book chapters. 1 international and 16 national workshops, 6 student workshops and 1 Faculty Development programme were also organized by the school. A MOOCs titled Direct Tax- Laws and Practice under SWAYAM Platform was offered by Prof S S Sarkar of Business Administration, which was a hugely enrolled course and ranked in the top MOOCs in India.

The department of Business Administration experienced a very good placement record for the MBA students. 9 students of the department of Commerce were also placed in reputed organizations and several students were selected for higher studies in reputed institutions like IIM Udaipur, IIMBangalore, IIM Srimaur.

Overall, it was a challenging yet productive for the school.

DEPARTMENT OF BUSINESS ADMINISTRATION

About the Department

The Department of Business Administration started functioning under the School of Management Sciences on January 18, 1995, with its first batch of MBA students. Currently, it offers Masters in Business Administration (4 Semesters), Master in Tourism and Travel Management (4 Semesters), MBA Executive (3 Semester), Certificate Course in National Stock Exchange Certified Capital Market Professional (NCCMP) and PhD Program. So far, the Department has produced 26 batches of Full Time MBA Graduates, 4 batches of Part Time MBA Graduates, 14 batches of Post-Graduate Diploma Holders in Tourism Management, and 5 batches of Master of Tourism and Travel Management. In addition, the Department offers dual specialization in the areas of Marketing Management, Human Resource Management, Financial Management, and Operations Management and Systems Management. The Department draws students and faculty from premier institutes of the country and interdisciplinary backgrounds. The Department also has several international students.

Several major industry-oriented research projects sponsored by IGIDR, AICTE, Planning Commission GoI, MHRD, NEDFI, MAKAIAS and ICSSR have been carried out by the faculty in thrust areas such as, Entrepreneurship, Small Enterprise Management, Tourism Management, Rural Development, Organizational Development, Tax Management, and Micro Finance. In addition, the Department has been organizing Refresher Courses, Faculty Development Programme and Management Development Programmes for Executives of reputed organizations and offers consultancy services to organizations.

The Department has a well-equipped computer lab with the latest software. Classrooms are ICT enabled. The Department ensures that the students get theoretical knowledge and extensive practical exposure through the field and Industry visits. Many faculty members from the Department are associated with reputed national and international institutes. The Department incorporates the latest trends in management education into the teaching method. All students undergo a foreign language course (French, German or Chinese) under the Choice Based Credit System.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|--|----------------|
| Master of Business Administration | 58 |
| Master of Business Administration (Executive) | 30 |
| Master of Tourism and Travel management | 21 |
| <i>Certificate Course in National Stock Exchange Certified Capital Market Professional (NCCMP)</i> | 35 |
| PhD | 12 |

Thrust Research Areas of the Department

- Inclusive Development
- Tourism
- Finance, Organization Behaviour, and Operation Management

Major Facilities/Equipment available

- ICT Enable Classroom- 05 Nos
- Board Room- 01
- Seminar Hall/ Smart Classroom- 01
- MDP/ Case Study Room- 01

- Student Lounge with AC- 01
- Girls Common Room- 01
- Corporate Lounge- 01
- Interview Room- 01

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------------|---------------------------|---|---|------------------------------------|---|
| | Mrinmoy Kumar Sarma | PhD (Tezpur University) | Tourism Marketing, Relationship Marketing, Services Marketing, Salesmanship, Research Methodology | mrinmoy | 24-01-2005 |
| | Chandana Goswami | PhD (Gauhati University) | General Management, Financial Management | cg1 | 30-03-2009 |
| | S. S. Sarkar | PhD (Tezpur University) | Accounting, Taxation, Social Development Issues | subh | 03-09-2010 |
| Professor | Debabrata Das | PhD (Rajiv Gandhi University) | Financial Management, Microfinance, Banking, Capital Market, Insurance Financial Inclusion | ddas09 | 06-09-2010 |
| | Chandan Goswami | PhD (Tezpur University) | Marketing, Advertising, Tourism | chand | 27-12-2012 |
| | Papori Baruah | PhD (Tezpur University) | Behavioral Sciences, Human Resource Management, Change Management, Rural Development and Management, NGOs, Organizational Development, Performance Management, Human Resource Development | papori | 16-01-2015 |
| | Tridib Ranjan Sarma | PhD (Tezpur University) | Optimization, Project management, Quality Management, Operations, Adventure Sports | tridib | 13-11-2009 |
| Associate Professor | Anjan Bhuyan | PhD (Tezpur University) | Managerial Economics, Entrepreneurship, International Trade, Economics of Tourism, Rural Development | anjanb | 03-09-2010 |
| | Arup Roy | PhD (Tezpur University) | Stock Market, Derivatives, Financial Engineering, Microfinance | arup | 28-11-2013 |

| | Runumi Das | PhD (Gauhati University) | Human Resource, Marketing, Tourism | runumi | 12-01-2019 |
|--------------------|---------------------|--|---|----------|------------|
| | Heera Barpujary | PhD (Tezpur University) | Web Technology, Knowledge Management | heera | 23-08-2005 |
| Assistant | Kakali Mahanta | PhD (Dibrugarh University) | Human Resource | kakali | 03-03-2012 |
| Professor | Mridul Dutta | PhD (Gauhati University) | Tourism and IPR | mridul | 01-10-2010 |
| | Prayash Baruah | MBA (Symbiosis Institute of Operations Management) | Operation Management | prayashb | 01-02-2017 |
| | Amitava Banerjee | M Com | Labour Law | | |
| Guest Faculty | Indrajit Dutta | MTM | Hotel Management | | |
| | Sandeep Jain | PGP (IIMA) | Entrepreneurship | | |
| Adjunct Faculty | Amlan Bora | MBA (AIT) | Product Management | | |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the | |
|----------------------------|-------------------|-------------------------------|---------------------|--|
| | | | current position | |
| Senior Technical Assistant | Tarunjyoti Borah | taruntu | 13-07-2010 | |
| Technical Assistant | Kushal Roy | kushal | 05-07-2013 | |
| Multi Tasking Staff | Suren Kumar Borah | surenb | 01-11-1996 | |
| Office Assistant | Subham Paul | subhamp | 18-02-2022 | |

Major Research and Development Findings

| Faculty/ Researcher | Salient Research Findings |
|---------------------|---|
| Mrinmoy Kr. Sarma | Development of Tourism Convenience Index for Major Tourism Destinations |
| and Kakali Mahanta | in the State of Assam |
| Mridul Dutta | Reviving cultural artefact Gamosa through Intellectual Property Management in |
| | Assam and Innovative supply chain |
| S. S. Sarkar | Post Project Evaluation of SHYAMA PRASAD MUKHERJEE RURBAN |
| | Mission in NE States, Odisha and Bihar |

Research Projects (both Ongoing and New)

| Project Title | Funding Agency | Amount (in INR) | Duration | Investigator(s) |
|----------------|----------------|-----------------|----------|-----------------|
| UGC STRIDE | UGC | 11,00,000 | 3 YEARS | Mridul Dutta |
| UGC SAP DRS II | UGC | 39,10,000 | 5 YEARS | Chandan Goswami |

Publications by Faculty

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

• Dutta, D. & Sarma, M. K. (2022). Adoption of Digital Innovations: A Special Reference to Routinised Incremental Innovations. *Review of Market Integration, First Online (),* 1-25.

- Dutta, S., Sarma, T. R. (2022). Socio- Economic Issues in Disaster Relief Operations And Incorporation Of NGOs In Relief Supply Chain. *Lakhimpur Commerce College Research Journal*, 4 (1), 1-10.
- Bhattacharyya, S. & Goswami, C(handana) (2021). Antecedents of E-Referrals: A Study of Mobile Banking Applications. *IITM Journal of Business Studies*, 9 (1), 63 -69.
- Sarkar, S. S (2021). Impact Assessment of CSR under Companies Act 2013 in Assam with respect to SDGs. Submitted to the National Foundation for Corporate Governance (NFCG), a PPP under the Ministry of Corporate Affairs, Government of India and accepted by NFCG.
- Dutta, D. & Sarma, M. K (2021). Internet skills as an influencer for adoption of digital innovations in a technologically emerging nation: India, Vilakshan. *XIMB Journal of Management*.
- Dutta, D. & Sarma, M. K (2021). Adoption of digital innovation: Formulating Adopter categories and levels of adoption in a digital sphere in an emerging economy. *International Journal of Innovation and Technology Management*, 17 (8), 2050059-1 2050059-21.
- Gogoi, K. & Baruah, P (2021). Goal Setting: Its Impact on Employee Outcome. *SCMS Journal of Indian Management*, 18 (1).
- Kalita, B.J. & Bhuyan, A. (2021). Feasibility of Diversification Strategy for Sustainable Jute Cultivation: A Study in Assam *.SMS Journal of Entrepreneurship & Innovation*, 7 (2),13-25.

Publication of Books

• Baruah, R. & Baruah, P (2021). *Teamwork in Telecom Sector*. Notion Press.

Publication of Book Chapters

- Gurung. D. J., Brahma. P. & Goswami. C (2022). *Sustainable Luxury Tourism: Promises and Perils*. The Emerald Handbook of Luxury Management for Hospitality and Tourism(353-378) Emerald Publishing Limited. [DOI: 10.1108/978-1-83982-900-020211018].
- Gurung. D. J., Brahma. P. & Goswami. C (2022). *Sustainable Luxury Tourism: Promises and Perils*. The Emerald Handbook of Luxury Management for Hospitality and Tourism (353-378) Emerald Publishing Limited. [DOI: 10.1108/978-1-83982-900-020211018].

Publication of Articles in Conference Proceedings

- Ayengia, T. Chetia, J. & Baruah, P (2021). Revisiting Talent Management Practices in the context of a pandemic driven landscape: A qualitative investigation of Private Sector Organization. International e-Conference on Changing Global Economic Landscape Challenges, Strategies and Business Resilience, organized by the Department of Commerce, Christ University and Institute of Management Accountants, USA.
- Bhatia, R. & Baruah, P (2021). National culture derives the intensity of organizational justice under exclusive talent management strategy: An integrative research. *International E- Conference on Advances in Business and Management, Shaheed Bhagat Singh College, Department of Commerce, University of Delhi, India.*

Pedagogy and Content Development

• Direct Tax - Laws and Practice - Prof S S Sarkar

| Name of | Purpose of | Title of Event | Date/ | Organizer and Venue |
|-------------|---------------|----------------------------------|--------|---------------------------------|
| Faculty | Attending | | Period | |
| Member | | | | |
| Prof Papori | Participation | Changing Global Economic | 2021 | Department of Commerce, |
| Baruah | | Landscape Challenges, Strategies | | Christ University and Institute |
| | | and Business Resilience | | of Management Accountants, |
| | | | | USA (e-Conference) |
| Prof Papori | Conference | An integrative research. | 2021 | Shaheed Bhagat Singh |
| Baruah | | International E- Conference on | | College, Department of |
| | | Advances in Business and | | Commerce, University of |
| | | Management | | Delhi, India (e-Conference) |
| Dr Tridib R | Conference | Financial Management: Teaching | 2021 | IIM Indore.Madhya Pradesh |
| Sarma | | and Research Perspectives | | (e-Conference) |

Conference/Workshop/Symposium/Seminar etc. Attended

Other Significant Activities of the Department

- Personality Development Workshop for MBA 4th Semester done by M's Walchand Pepople First Ltd, Mumbai, (19th to 21st March, 2022)
- Design Thinking workshop for MBA 4th semester done by, M/s ThinkerLabs Design Solutions Pvt Ltd. Mumbai, (12th & 13th March, 2022)
- Konnect- An Engagement/ Step-IN: March Ahead from (4th September to 3rd October, 2021)
- 2 weeks Yoga Workshop for newly admitted MBA students from (16th to 31st August, 2021)
- Digital Workshop on Community- Based Tourism post COVID-19 (An initiative under UGC-SAP) (27th July, 2020)

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|--------------------|
| NET | 03 | PhD |

| Notable Placement of Student | S |
|------------------------------|---|
|------------------------------|---|

| Name of Student | Academic | Placement | Company/ | Mode of |
|-----------------------|-----------|---|-----------------------|------------|
| | Programme | Designation | Organization | Selection |
| Arindam Rajkhowa Deka | MBA | Sales Trainee | ITC Limited | On- Campus |
| Samrat Deb | MBA | Sales DSE | Perfetti Van | On-Campus |
| Bapan Roy | MBA | Executive Trainee- Customer Development | Hindustan Unilever | On- Campus |
| Baishali Dey | MBA | Sales | SBI Life | On- Campus |
| Bandana Nath Kumar | MBA | Sales | SBI Life | On- Campus |
| Aman Das | MBA | Sales | SBI Life | On- Campus |
| Manash Pratim Borah | MBA | Sales | SBI Life | On- Campus |
| Babli Das | MBA | Sales | SBI Life | On- Campus |
| Ajitesh Dhar | MBA | Territory Sales | MRF Limited | On- Campus |
| Dipesh Upadhyay | MBA | Territory Sales | MRF Limited | On- Campus |
| Chetona Boruah | MBA | Assistant Manager (Admission) | SRVA Education | On- Campus |

| Sneha Phukan | MBA | Assistant Manager (Admission) | SRVA Education | On- Campus |
|---------------------------|-----|----------------------------------|--------------------|------------|
| Akash Borthakur | MBA | Assistant Manager (Admission) | SRVA Education | On- Campus |
| Himangshu S Saikia Phukan | MBA | Executive Trainee | Bharti Airtel Ltd. | On- Campus |
| Tushar Luitel | MBA | Territory Sales | Vodafone idea | On- Campus |
| Angshuman Das | MBA | Management Trainee | Vodafone idea | On- Campus |
| Rahul Das | MBA | Management Trainee | Vodafone idea | On- Campus |
| Nirangkush Das | MBA | Sales Trainee | ITC Limited | On- Campus |
| Binita Brahma | MBA | Area lead Sales | UDAAN | On- Campus |
| Anirban Goswami | MBA | Area lead Sales | UDAAN | On- Campus |
| Shahana Shehnaz Begum | MBA | Platform Advisory | Accenture | On- Campus |
| Mourjya Kanak Deka | MBA | Platform Advisory | Accenture | On- Campus |
| Rimismita Kalita | MBA | Platform Advisory | Accenture | On- Campus |
| Jitendra Lamsal | MBA | Platform Advisory | Accenture | On- Campus |
| Gargisha Saikia | MBA | Junior Research | Fin-Advisors | On- Campus |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic | Name of other Institute | Enrolled Academic |
|-------------------|-----------|-------------------------|-------------------|
| | Programme | | Programme |
| Bhuyashi Talukdar | MBA | IIT-Kharagpur | Ph.D |
| Trinayani Das | MTTM | Assam University | Ph.D |

DEPARTMENT OF COMMERCE

About the Department

The Department of Commerce is the second department established under the "School of Management Sciences". It came into existence in the year 2013. The department has been offering a five-year Integrated Master of Commerce (M. Com.) programme since 2014. The Integrated M.Com programme is offered with the option of lateral exit on successful completion of six semesters with B.Com (Hons) degree and lateral entry in the Seventh Semester (subject to fulfilment of eligibility criteria) for the M. Com. Degree. In addition the department is offering Doctor of Philosophy (Ph.D.) in Commerce programme from the academic session 2020-2021. Scholars joining the Ph.D. programme in the department need to compulsorily complete the coursework, where they need to complete 16 credit courses over the period of two academic senseters. The department aims to ensure that the scholars completing the Ph.D. course from the department can establish themselves in academics and can make qualitative and meaningful contribution to the existing body of knowledge. Apart from providing quality education, this department ensures that the youths can face the various competitive examinations and pursue various other courses. The Department aims to impart quality education to its students and inculcate a research culture among them to equip them with necessary skills and knowledge needed for employment in corporate sectors and to pursue a research career.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|--------------------|-----------------------------------|
| Integrated M.Com | 33 |
| M.Com | 12 |
| Ph.D | Variable (admitted 07 in 2021-22) |

Thrust Research Areas of the Department/Centre

- Accounting
- Finance
- Economics

Major Facilities/Equipment available

- Interactive Pen Display
- Multi Media projectors
- Audio Podium with Microphone and Speaker
- Student Response system
- Digital Notice Board

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------------|---------------------|---|--|------------------------------------|---|
| Associate Professor | Santi Gopal Maji | | Intellectual Capital, Corporate Sustainability and Sustainable Development, Risk Management, Corporate | <u>sgmaji</u> | 16-12-2019 |

| | | | Governance | | |
|-----------|-----------------------------------|--|--|----------------------|--|
| | Reshma K. Tiwari | Ph.D (Gauhati University) | Accounting, Auditing, Forensic Accounting | <u>reshma</u> | 25-02-2014 |
| | Farah Hussain | Ph.D (Dibrugarh University) | Econometrics, Mathematical Economics, Development Economics | farah | 16-01-2017 |
| Assistant | Manish Kumar | Ph.D (Delhi University) | Corporate Finance and Accounting | manish | 21-02-2017 |
| Professor | Biswajit Ghose | Ph.D (North- Eastern Hill University) | Corporate Finance, Corporate Governance, Microfinance | bghose | 10-12-2019 |
| | Dhritabrata Jyoti Bharadwaz | M. Phil (Dibrugarh University) | Accounting, Finance, Risk Management | bharadj | 23-07-2018 |
| Pra | Prasenjit Roy | Ph.D (North- Eastern Hill University) | Banking and Finance | royp | 29-11-2021 |
| | Anjan Chowdhury | PG in Hospitality Management and Applied Nutrition | Soft Skills Trainer and Career Counseling | anjanchowdhury | Autumn Semester 2021 |
| Ba | Amitava Banerjee, CS | ACS, LLB, M. Com | Corporate Governance & Company Act. | amitbanerjee197 9 | Autumn Semester 2021 and Spring Semester 2022 |
| | Shobhan Singh Khanka | Ph. D. | Entrepreneurship | sskhanka2 | Autumn Semester 2021 |
| Guest | | Ph.D | Banking and Finance | pinkydutta | Autumn Semester 2021 |
| Faculty | Rishabh Goswami | M. Com | Accounting and Finance | | Autumn Semester 2021 |
| | Manoj Khaund | M. Com | Management & Marketing | manojkhaund | Autumn Semester 2021 and Spring Semester 2022 |
| | Rupjyoti Saha | M. Com | Accounting and Finance | rupjyoti.1122 | Autumn Semester 2021 |
| | Ananya Sarmah | M. Com | Finance | ananyasarmah1 00 | Autumn Semester 2021 and Spring |

| | | | | | Semester 2022 |
|-------|---------|-----|------------------------|------------|------------------|
| Purni | ima Ph. | . D | Accounting and Finance | purnimacuh | Autumn |
| Singl | n | | | | Semester |
| | | | | | 2021 |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the |
|------------------|-------------------|-------------------------------|---------------------|
| | | | current position |
| Office Assistant | Bijoy Kumar Domai | <u>bdomai</u> | 15-10-2019 |
| MTS | Nipen Dutta | nipend | 06-02-2016 |

Research Projects (Submitted in March 2022)

| Project Title | Funding Agency | Amount (in INR) | Duration | Investigator(s) |
|----------------------------------|-----------------------|-----------------|----------|------------------|
| Forensic Accounting Education | ICSSR | 10,00,000 | 2 years | Reshma K. Tiwari |
| in India: Prospects and Problems | (IMPRESS) | | | |

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Maji, S.G. & Saha, R. (2021). Gender Diversity and Financial Performance in an Emerging Economy: Empirical Evidence From India, *Management Research Review*, 44(12):1660-1683.
- Hussein, S.S., Maji, S.G., & Panda, N.M. (2021). The Impact of Budget Participation on Managerial Performance: Evidence from Manufacturing Firms of Iraq, *SCMS Journal of Indian Management*, XVIII(3): 28-38.
- Maji, S.G. and Goswami, M. (2022). The association between human capital efficiency and credit risk of Indian banks: a change point analysis. *International Journal of Learning and Intellectual Capital*, 19(3), 194-216.
- Maji, S.G. and Kalita, N. (2022). Climate Change Financial Disclosure and Firm Performance: Empirical Evidence from Indian Energy Sector based on TCFD Recommendations, *Society and Business Review* (Online), https://doi.org/10.1108/SBR-10-2021-0208.
- Saha, R. and Maji, S.G. (2022). Board human capital diversity and firm performance: evidence from top listed Indian firms, *Journal of Indian Business Research* (online), https://doi.org/ 10.1108/JIBR-08-2021-0289.
- Kumar, M., Vij, M. and Goswami, R. (2021). Effect of Real Earnings Management on Firm Performance: Evidence from India. *Vision: The Journal of Business Perspective*. https://doi.org/10.1177%2F09722629211007577.
- Kumar, M. and Goswami, R. (2021). Managerial Ability and Real Earnings Management Among Indian Listed Firms. *Vision: The Journal of Business Perspective* https://doi.org/10.1177%2F09722629211046065
- Tiwari, R.K. & Debnath, J. (2022). Forensic Accounting and Non-Audit Services: Indian Context. *Finance India*, 36 (1), 281-295.
- Tiwari, R.K. & Debnath, J. (2021). Joint Provision of Non-audit Services to Audit Clients: Empirical Evidences from India. *VIKALPA The Journal for Decision Makers*, 46(3). https://doi.org/10.1177/02560909211041796

Publication of Book Chapters

• Maji, S.G. & Saha, S. (2022). Impact of climate related financial disclosure on firm performance: empirical evidence from Indian industrial construction firms. In Swar, B.N., and Singhal, N., Editors, *Rethinking Business Agility During Uncertainty*, pages 92-106, Routledge, Taylor and Francis Group, NY, ISBN:978-1-032-33382-3.

- Maji, S.G. & Sur, O. (2022). Board gender diversity and bank performance: Evidence from listed Indian banks, In Swar, B.N., and Singhal, N., Editors, *Rethinking Business Agility During Uncertainty*, pages 166-177, Routledge, Taylor and Francis Group, NY, ISBN:978-1-032-33382-3.
- Ghose, B. (2021). Has North-East India done enough on poverty, hunger and health? Perspective from sustainable development goals. In Das, B. K., Lalropuii., Lalromawia, K., and Singh, P. K., editors, *Local Governance and Management in North East India*, Volume 1(1), pages 1-18. ISBN: 978-93-90692-15-6. Mittal Publications, New Delhi.
- Hussain, F. (2021). Is spice cultivation the answer for income generation of Tribal Women? Findings from Kamrup rural district of Assam. In Bujarbaruah, K., and Devi, I. P., editors, *Research in Social Science and Humanities in the Indian Perspective*, Volume 1(1), pages 1-12. ISBN: 978-93-82267-82-9. Worldview Publications, Delhi.
- Bharadwaz, D. J (2022). Covid-19 Outbreak and Its Affect on the Stock Market. In Kakati, R. P., and Mahanta, M., editors, *Business Practices in the Age of Innovation, Disruption and Sustainability*, Volume 1(1), pages 138-149. ISBN: 978-93-91355-55-5. Excel India Publications, New Delhi.

| Name of | Purpose of Attending | Title of Event | Date/Period | Organizer and Venue |
|---------------------|--|--|---------------------------------|---|
| Faculty/Staff | | | | |
| Member | | | | |
| Manish Kumar | Paper Presentation | International Conference on Emerging Trends in Accounting and Finance (ICETAF) 2021 | 11-11-2021 to 12-11- 2021 | Department of Commerce, Tezpur University (Online) |
| Biswajit Ghose | Who pays dividend? An empirical investigation of listed Indian firms | National E-Conference on 'Advances in Business, Management and Technology' | 25-06-2021 to 26-06- 2021 | Department of Management Sciences, Mahatma Gandhi Central University, Bihar |
| Biswajit Ghose | Paper presentation (Impact of firm characteristics on propensity to pay dividend as proposed: Empirical evidence from India) | International Conference on Emerging Trends in Accounting and Finance (ICETAF) 2021 | 11-11-2021 to 12-11- 2021 | Department of Commerce, Tezpur University (Online) |
| Reshma K. Tiwari | Paper presentation (Forensic Accounting Education and Regulation: Status quo in the global context) | International Conference on Sustainable Finance, Economics & Accounting in the Pre- and Post- Pandemic Era | 30-07-2021 to 31-07- 2021 | Indian Institute of Management (IIM) Jammu (Online) |
| Reshma K. Tiwari | Paper presentation (Statistics and | One day National Seminar on Business | 03-09-2021 | Department of Business |

Conference/Workshop/Symposium/Seminar etc. Attended

| | Forensic Accounting: A systematic review of literature) | Practices in the age of Disruption, Innovation and Sustainability, 2021 | | Administration, Gauhati University (Online) |
|------------------------------------|---|--|--|--|
| Reshma K. Tiwari | Paper presentation (The DHFL fiasco: A case study) | One day National Seminar on Business Practices in the age of Disruption, Innovation and Sustainability, 2021 | 03-09-2021 | Department of Business Administration, Gauhati University (Online) |
| Reshma K. Tiwari | Paper Presentation (Forensic Accounting and Fraud Investigation: A Case of a Government Company) | International Conference on Emerging Trends in Accounting and Finance (ICETAF) 2021 | 11-11-2021 to 12-11- 2021 | Department of Commerce, Tezpur University (Online) |
| Reshma K. Tiwari | Paper Presentation (Forensic Accounting Services: Education and Regulation) | 2nd International Conference on Changing Business Paradigm, (ICCBP- 2022) (Theme- Rethinking Business Agility during Uncertainty) | 21-01-2022 to 23-01- 2022 | Management Development Institute -Murshidabad (Online) |
| Farah Hussain | Paper Presentation | International Conference on Emerging Trends in Accounting and Finance (ICETAF) 2021 | 11-11-2021 to 12-11- 2021 | Department of Commerce, Tezpur University (Online) |
| Dhritabrata Jyoti Bharadwaz | Paper Presentation | One day National Seminar on Business Practices in the age of Disruption, Innovation and Sustainability, 2021 | 03-09-2021 | Department of Business Administration, Gauhati University (Online) |
| Santi Gopal Maji | Paper presentation (Corporate Climate Change Disclosure And Firm Performance: Testing The Apocryphal Relation) | International Conference on Innovative Research Practices in Social Science -2021 (IRPSS 2021) | 10-12-2021 to 10-12- 2021 | IEM Kolkata |
| Santi Gopal Maji Santi Gopal | Paper presentation (Impact of Climate Related Financial Disclosure on Firm Performance: Empirical Evidence from Indian Industrial Construction Firms) Paper presentation | 2nd International Conference on Changing Business Paradigm, (ICCBP- 2022) 2nd International | 22-01-2022 to 23-01-2022 22-01-2022 | MDI Murshidabad MDI Murshidabad |

| Maji Santi Gopal | (Board gender diversity and bank performance: Evidence from listed Indian banks) Paper presentation | Conference on Changing Business Paradigm, (ICCBP- 2022) 6th Interdisciplinary | to 23-01-2022 16-12-2021 | Faculty |
|---------------------|--|---|--------------------------------|---|
| Maji | (The Impact of Intellectual Capital Disclosure on Firm Performance: A Comparative Evaluation Between Indian Knowledge Based and Traditional Manufacturing Firm) | Conference of Management Researchers (6th ICMR) | to 17-12-2021 | of Management Studies, Sabaragamuwa University of Sri Lanka in association with Emerald |
| Santi Gopal Maji | Participation | Online Workshop on Writing Impactful Research | 08-07-2021 | Sabaragamuwa University of Sri Lanka in association with Emerald Publishing and Gulf Medical University |
| Santi Gopal Maji | Participation | Online Workshop on How to improve article acceptance rate and publish Quicker: A publisher and author's Perspective | 29-07-2021 | Sabaragamuwa University of Sri Lanka in association with Emerald Publishing and Gulf Medical University |
| Santi Gopal Maji | Participation | Online Workshop on How to identify fake/predatory/cloned journals in academics | 05-08-2021 | Sabaragamuwa University of Sri Lanka in association with Emerald Publishing and Gulf Medical University |
| Santi Gopal Maji | Participation | Online Workshop on Elsevier Tools Facilitating Research Writing | 15-07-2021 | Sabaragamuwa University of Sri Lanka in association with Emerald Publishing and Gulf Medical University |

Invited Talk

| Name of Faculty Member | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|------------------------------|--------------------------|---|------------|---|
| Santi Gopal Maji | Intellectual Capital | Refresher Course on Commerce and Entrepreneurship | 30-10-2021 | UGC-HRDC, North- Eastern Hill University |
| Santi Gopal | Use of SPSS in Classical | | 11-12-2021 | UGC-HRDC, North- |

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| MajiLinear regressionSPPSSEastern I | Hill University |
|-------------------------------------|-----------------|
|-------------------------------------|-----------------|

| Name of Awardee | Designation of Awardee | Achievement | Event/Awarded by |
|---------------------|---------------------------|--|--|
| Manish Kumar | Faculty Member | Best Paper Award | International Conference on Emerging Trends in Accounting and Finance (ICETAF) 2021; held ONLINE during November 11-12, 2021 at the Department of Commerce, Tezpur University. |
| Biswajit Ghose | Faculty Member | Best Paper Award | International Conference on Emerging Trends in Accounting and Finance (ICETAF) 2021; held ONLINE during November 11-12, 2021 at the Deparment of Commerce, Tezpur University. |
| Reshma K. Tiwari | Faculty Member | Best Paper Award | 2nd International Conference on Changing Business Paradigm, (ICCBP-2022) (Theme- Rethinking Business Agility during Uncertainty) held ONLINE during 21-01-2022 to 23-01-2022 at the Management Development Institute -Murshidabad |
| Santi Gopal Maji | Faculty Member | Most downloaded papers over the last five year in the journal "Asian Review of Accounting" (Emerald) | Emerald publishing in 2022 |

Awards/Honours/Notable Achievements

Other Significant Activities of the Department/Centre

- International Conference on Emerging Trends in Accounting and Finance (ICETAF), 11th & 12th November 2021
- Online Five Days Faculty Development Programme (FDP) on Strategic Management in New Economic Environment Organized by Department of Commerce, Tezpur University in Collaboration with AICTE Training and Learning (ATAL) Academy, (22 nd 26th September, 2021)
- Five Day Workshop on Research Methodology and Report Writing, 09-16 February, 2022
- Workshop on Forensic Accounting Education, 5th March, 2022
- Good Academic Research Practices, 30th November, 2021
- Ice-breaking sessions, 15th March, 2022

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|--------------------|
| NET | 01 | Int. M.Com |

Notable Placement of Students

| Name of Student | Academic | Placement Designation | Company/ | Mode of |
|--------------------|------------|------------------------------|-----------------|------------|
| | Programme | | Organization | Selection |
| Garima Sonowal | Int. M.Com | Assistant Assounts Officer | ADDCL Sives and | Off Commun |
| | | Assistant Accounts Officer | APDCL, Sivsagar | Off-Campus |
| Prarthana Kashyap | Int. M.Com | Junior Associate | SBI, Nagaon | Off-Campus |
| Koushik Chetia | Int. M.Com | Officer in Junior Management | Federal Bank | On-Campus |
| Rajdeep Nath | M.Com | Officer in Junior Management | Federal Bank | On-Campus |
| | Int. M.Com | Application Development | | On-Campus |
| Arnab Nandi | | Associate | Accenture | |
| | M.Com | Application Development | | On-Campus |
| Shatarupa Konwar | | Associate | Accenture | |
| Olivia Sur | M.Com | Financial Analyst | TCS | On-Campus |
| | Int. M.Com | Client Services Department | TCS & HDFC | On-Campus |
| Himashree Mazumdar | | | AMC | |
| Nikhita Chauhan | Int. M.Com | Trainee BPS | TCS | On-Campus |
| Debaleena Goswami | Int. M.Com | Research Assistant | IIM Udaipur | Off-Campus |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic | Name of other Institute | Enrolled Academic |
|--------------------|--------------------------|-------------------------|--------------------------|
| | Programme (in TU) | | Programme |
| Arbita Chakrabarty | Int. M.Com | IIM Udaipur | Ph. D in Management |
| | | | (Finance and Accounting) |
| Bitopan Das | Int. M.Com | IIM Bangalore | MBA |
| Gilbartson Sonowal | Int. M.Com | IIM, Sirmaur | MBA |
| Bhawana Kropi | Int. M.Com | IIM, Sirmaur | MBA |
| Bhavna Kashyap | Int. M.Com | Dept. of Business | MBA |
| | | Administration, Tezpur | |
| | | University | |

CENTRE FOR DISASTER MANAGEMENT

About the Centre

The Centre for Disaster Management was established in 1997 under the Central Sector Scheme of the NDM Division, Ministry of Agriculture and Cooperation, Government of India. The scheme has subsequently been transferred to the Ministry of Home Affairs, Government of India in 2002. At present, the Centre is functioning under Tezpur University. The Centre conducts the following programmes:

- Two open elective courses on disaster management for UG and PG programmes.
- One skill enhancement course on Disaster Management for Integrated M. Sc. programmes.
- Diploma in Environment and Disaster Management under CDOE, Tezpur University, in association with the Department of Environmental Science.
- Extension activities and awareness programmes.

Thrust Research Areas of the Department/Centre:

Disaster Risk Assessment and Risk Reduction Planning

Major Facilities/Equipment available

- One Classroom
- One Faculty room

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------------|------------|---|---|------------------------------------|--|
| Assistant Professor | Dipak Nath | Ph.D. (Gauhati University) | Nuclear Physics & Cosmic Radiation / Disaster Risk Assessment | dipak | 01-07-2010 |

Conference/Workshop/Symposium/Seminar etc. Attended

| Name of Faculty/Staff Member | Purpose of Attending | Title of Event | Date/ Period | Organizer and Venue |
|------------------------------------|-------------------------|---|-----------------------------|--|
| | Participation | 7 th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics | 12-07-2021 to 15-07-2021 | IISc., Bangaluru and IIT, Roorkee (Online) |
| Dipak Nath | Participation | Training on Rapid Capacity enhancement for risk reduction during active COVID-19 Response | 19-01-2022 to 21-01-2022 | NIDM, New Delhi (Online) |
| | Participation | Consultation meeting: Multi Hazard disaster Risk and Resilience. | 24.01.2022 | NIDM, New Delhi (Online) |

Invited Talk

| Name of Faculty Member | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|------------------------------|---|--|------------|---|
| Dingle Math | Disaster Risk Reduction: Concept and Holistic Approaches | Workshop on Community Based Disaster Risk Reduction Approaches for Local Resilience | 20-05-2021 | Assam University, Silchar, Assam (Online) |
| Dipak Nath | Disaster Management: Concept and Approaches | International Webinar on Environmental Issues: Risk, Management and Sustainable Development | 29-01-2022 | Bijni College, Assam (Online) |

INTELLECTUAL PROPERTY RIGHTS CELL

About the Cell

The Intellectual Property Rights Cell (TUIPR Cell) at Tezpur University was established in 2009 with a vision to develop human resource in the management of Intellectual Property Rights. The cell is an integral part of the innovation process and the innovation value chain in the University. Several patent, copyright, and industrial design applications have been filed based on the innovations done at Tezpur University. The Cell has been involved in several IPR awareness and implementation programs on the University Campus and also across the North-East region. The Cell is gradually building IPR consciousness in the region, not only within the institutions but also among different strata of society.

Academic Programmes and Student Intake

| Open Elective Courses | Student Intake |
|--|----------------|
| IP750: Intellectual Property Rights in Research and Beyond | 15 |
| IP250: Fundamentals of Intellectual Property Rights | 30 |

Thrust Research Areas of the Department/Centre

• Geographical Indication

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|-------------|------------|---|---------------------|------------------------------------|--|
| DPIIT-IPR | Pritam Deb | Ph.D (Jadavpur) | Patent, PCT, GI and | pdeb | 01-12-2020 |
| Chair | | | Trade Secret | | |
| Professor | | | | | |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the |
|--------------------|-------------------------|-------------------------------|---------------------|
| | | | current position |
| Research Assistant | Dr. Juri Borbora Saikia | juriipr | 01-12-2020 |
| | Dr. Koushik Saikia | koushik | 11-01-2021 |
| Office Assistant | Saurav Deka | office-ipr | 29-04-2021 |

Publication of Patents

| Inventor(s) | Patent Title | Application/ Patent Number | | Country |
|---|---|-------------------------------|-----------|---------|
| Ayan Bhattacharjee, Devesh Kumar and Laxmikant S. Badwaik | Development of low fat baked snacks using de- oiled soya flour | 202031039202 | Published | India |
| Arup Jyoti Choudhury, Gazi Ameen Ahmed, Namita Ojah | Polymer/antibiotic coated Muga (antheraeaassamensis) silk suture | 201931020788 | Published | India |
| Chiranjeev Bezbaruah, Parag Nath and Robin Kumar Dutta | Removal of arsenic from ground water by capsule technique. | 202031002271 | Published | India |
| Tarun Kumar Sharma, Anjali Anand, Robin Doley | Aptamers against phospholipase A2 in snake Venom and uses thereof | 201911027455 | Published | India |

| Poonam Mishra and Kumudhini | An improved iron fortification | 202031000071 | Published | India |
|------------------------------|--------------------------------|--------------|-----------|-------|
| Akasapu | technique for fortification | | | |
| | of rice using cold plasma | | | |
| Nayan M. Kakoty, Lakhyajit | An EMG based Prosthetic Hand | 201931049269 | Published | India |
| Gohain | Controller for Real Time | | | |
| | Grasping realizing | | | |
| | Neuromuscular Constraint | | | |
| Pritam Deb and Kasmiri Deka | Nanocatalyst for bio oil | 365565 | Granted | India |
| | production | | | |
| Brijesh Srivastava, Baby Z. | A process for manufacture of | 366731 | Granted | India |
| Hmar and Dipsikha Kalita | turmeric powder from raw | | | |
| | turmeric rhizomes | | | |
| Pritam Deb, Kakoli | Mesoporous secondary | 370787 | Granted | India |
| Bhattacharya and Devaborniny | nanostructures as | | | |
| Parasar | multifunctional heavy metal | | | |
| | scavenger | | | |

Invited Talk

| Name of | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|-------------------|--|---|-------------------------|--|
| Faculty Member | | | | |
| P. Deb | Intellectual Property as a strategic tool for regional development | IPR Awareness programme | 18-06-2021 | Department of Political Science & IQAC Dhakuakhana College, Dhakuakhana |
| | Intellectual Property Rights In the context of sustainable development | State Level Webinar on Intellectual Property Right in the context of sustainable development | 05-07- 2021 | IQAC, Mangaldai College, Mangaldai |
| | Need of Intellectual Property Rights for Sustainable Development | IPR Awareness programme | 03-08- 2021 | IQAC LOKD College, Dhekiajuli |
| | Innovation Ambience in Academic Institutions | Workshop on Innovation Ecosystem in Academic Institution | 09-03-2022 | Technology Enabling Center, Tezpur University at Pub Kamrup College, Guwahati |
| | Importance of Intellectual Property Management for Academic Institutions | IPR Awareness programme | 21-09-2021 | Internal Quality Assurance Cell (IQAC) of Khagarijan College, Nagaon |
| | Innovation, Adoption and Diffusion through IPRs | Entrepreneurship Development Programme For Young Innovators | 28-02- 2022 | IQAC, Nowgong College (Autonomous), Nagaon & Kolongpar Branch of Assam Science Society "XAKU"- An initiative from Campus to Community (NGO), Nagaon |
| | IPR & Institution Industry Interaction | One Week Faculty Development | 21-03-2022 to 25-03- | NIT, Silchar |

| | | Programme on | 2022 | |
|---------|-------------------------|-------------------------|------------|-----------------------|
| | | Intellectual Property | | |
| | | Rights for Sustainable | | |
| | | Development (IPRSD- | | |
| | | 2022) | | |
| | Understanding IPR and | Capacity building for | 25-03-2022 | Assam Police Training |
| | its Implication in Our | Enforcement and | | College at Dergaon |
| | Daily Lives | Adjudication of IPR | | |
| Juri B. | Geographical Indication | Intellectual property | 05-07-2021 | Dept. of Commerce and |
| Saikia | and its implication in | rights in contemporary | | Dept. of Economics, |
| | communities | world | | C.K.B. College, Teok |
| | Technology | Innovation ecosystem in | 26-03-2022 | Biswanath College, |
| | Commercialization in | academic institutes | | Biswanath Chariali |
| | the present-day | | | |
| | context/IP Right and | | | |
| | Technology Transfer | | | |

Awards/Honours/Notable Achievements

| Name of Awardee | Designation of Awardee | Achievement | Event/Awarded by |
|-----------------|---------------------------|-----------------|--------------------|
| Pritam Deb | DPIIT IPR Chair Professor | Visitor's Award | President of India |

Other Significant Activities of the Centre

Webinars

- 1. World IP Day on 26thApril, 2021.
- 2. National Webinar on Intellectual Property as a Strategic Tool for Regional Development at Dhakuakhana College on 18th June, 2021.
- 3. State Level Webinar on Intellectual Property Right in the context of sustainable development at Mangaldai College on 5th July, 2021.
- 4. National Webinar on Intellectual Property Rights in Contemporary World at C.K.B. College, Teok on 5th July, 2021.
- 5. National Level Webinar on Need of Intellectual Property Rights for sustainable development at LOKD College, Dhekiajuli on 2nd August, 2021.
- 6. National Level Webinar on Importance of IP Management for Academic Institution at Khagarijan College, Nagaon on 21st September, 2021.

Extension/Outreach Activities

- 1. Celebration of Azadi ka Amrit Mahotsav, DPIIT IPR Chair at Tezpur University organized an Entrepreneurship development Programme for Young Innovators on 28th February 2022 at Nagaon College (Autonomous) in association with Institution's Innovation Cell of Nagaon College.
- 2. DPIIT IPR Chair at Tezpur University has taken out a capacity building campaign at Assam Police Training College at Dergaon by organising a national level daylong workshop entitled "Capacity building for Enforcement and Adjudication of IPR" on 25th March, 2022.

Workshops

 A Brain storming session on "Prospects of protecting indigenous Ginger varieties of Assam using tools of IPR" was organized on 11th March 2022 at Tezpur University under the aegis of DPIIT-IPR Chair

- 2. A One Day Online Workshop on Intellectual Property Rights: Awareness and Celebration of Innovation was organized on 12th January, 2022 in association with the Cell for IPR Promotion and Management (CIPAM), New Delhi and the Department of Physics Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Eraligool, Karimganj, Assam.
- 3. One Day National Workshop Intellectual Property Rights & Technology Transfer and Their Role in Promotion of Innovations was organized on 4th March, 2022 in association with an Innovation Facilitation Centre, NRDC, New Delhi and School of Basic Sciences, The Assam Kaziranga University, Jorhat.
- An IPR Awareness Programme was organized on 21st March, 2022 under the National Intellectual Property Awareness Mission (NIPAM) in association with Indian Patent Office, Kolkata.

Internships/Training programs conducted by the IPR Chair

1. A Certificate course on prior art search and patent specification drafting was organized during 21st March to 25th March, 2022 in association with the DPIIT IPR Chair at Gujarat National Law University (GNLU), Gujarat.

Research Activities undertaken the University in regard to IPR

- 1. Post-GI work on Assam Muga
- 2. Pre-GI work on Indigenous ginger from North East

Other activities

1. A Memorandum of Understanding (MoU) has been countersigned in the month of February, 2022 between Tezpur University and Gujarat National Law University (GNLU)

REPORT OF THE DEAN, SCHOOL OF SCIENCES

About the School

The School of Sciences comprises of five academic departments:

- Chemical Sciences
- Environmental Science
- Mathematical Sciences
- Molecular Biology and Biotechnology
- Physics.

All the departments under the School of Sciences are DST-FIST and UGC-SAP supported. The departments under the School altogether offer a total of 12 academic programmes in the regular mode, apart from the PhD programmes. Each department offers discipline-specific UG, PG and Ph-D programmes. The departments of Chemical Sciences, Mathematical Sciences, Molecular Biology and Biotechnology and Physics offer 5-Yr Integrated M. Sc. programmes with an intake of 25 students each. The 4-Yr Integrated B. Sc. B. Ed. Programme, is offered by Chemical Sciences, Mathematical Sciences and Physics departments with support from the Department of Education under the School of Humanities and Social Sciences. The total yearly intake of students in all 12 non-Ph. D. programmes of the school stand around 325. Around 330 PhD students were on the roll under the School of Sciences during 2021-2022.

There are 77 faculty members, including 33 Professors, 8 Associate Professors and 36 Assistant Professors working in the five departments of the School. In addition, Prof. M. Lakshmi Kantam, Distinguished Professor at ICT, Mumbai, is an Adjunct Professor in the Department of Chemical Sciences. There is also one DST-INSPIRE faculty in the Department of Physics.

The faculty members of the School published around 300 research papers in high-quality peer-reviewed international and national journals and a few books during 2021-2022.

The faculty members of the School have externally research projects from agencies such as DST, DBT, Deity, DRDO, BRNS, SERB, CSIR and UGC. 84 research projects were being conducted during 2021-2022. The departments have active research collaboration with several reputed national and international institutes and organizations. In July 2021, Prof Pritam Deb of the Department of Physics was selected for the prestigious Visitor's Award for Technology Development, 2020.

Alumni of the school are well placed in various academic institutions and industries, mainly in India, which has continued in 2021-2022 as well. Many have joined higher studies in reputed institutes in India and abroad. The number of students that have qualified for NET, GATE and SLET, from the School of Sciences, remains high. Each department regularly organizes conferences/workshops and outreach programmes.

| Department/Centre | Academic Programmes Offered | Student Intake |
|-------------------|---|----------------|
| Chemical Sciences | M.Sc. in Chemistry | 25 |
| | Integrated M.Sc. in Chemistry | 25 |
| | Integrated B.Sc. B. Ed. (Chemistry major) | 13 |
| | Ph.D. | Variable |

Departments/Centres and Academic Programmes Offered

| Environmental Science | M.Sc. in Environmental Science | 38 |
|-----------------------|--|----------|
| | Ph.D. | |
| | | |
| Mathematical Sciences | M.Sc. in Mathematics | 53 |
| | Integrated M.Sc. in Mathematics | 25 |
| | Integrated B.Sc. B. Ed. (Mathematics major) | 13 |
| | Ph.D. | Variable |
| Molecular Biology and | M.Sc. in Molecular Biology and Biotechnology | 38 |
| Biotechnology | Integrated M.Sc. in Life Sciences | 15 |
| | Ph.D. | Variable |
| Physics | M.Sc. in Physics | 38 |
| | Integrated M.Sc. in Physics | 25 |
| | Integrated B.Sc. B. Ed. (Physics major) | 13 |
| | Ph.D. | Variable |

Important Activities

- The Department of MBBT is celebrating the Silver Jubilee on entering into 25th year of its establishment in 1997. The Silver Jubilee is being celebrated through a year-long programme starting on 24th July, 2021. Several workshops, distinguished lecture series and National Seminars have been organized so far.
- InSCIgnis 2022, the ninth edition of the annual science festival organized by the Students' Science Council under the aegis of the School of Sciences was held during 27th February to 1st March coinciding with the National Science Day. The theme for InSCIgnis 2022 was *Science Beyond Myths* and the event was participated by several luminaries and resource persons as well as a large number of student participants. All the five academic departments organized National Science magazine of the Students' Science Council was also released at the same time.

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the current position |
|-------------|------------------------|-------------------------------|--------------------------------------|
| Dean | Prof. Debajit Hazarika | debajit | 01-12-2020 |
| MTS(P/T) | Mohendra Das | mohen31 | 09-09-2019 |

Officers and Staff Members

DEPARTMENT OF CHEMICAL SCIENCES

About the Department

The Department of Chemical Sciences was established in the year 1997, with the prime objective of creating human resources in different areas of Chemical Sciences. Initially the Department offered an M.Sc. program in Polymer Science, which was converted to M.Sc. in Applied Chemistry from 2006 to 2009. In 2009, the department started the five-year Integrated M.Sc. in Chemistry program, and in 2010 the department again started M.Sc. in Chemical Sciences, later renamed as M.Sc. in Chemistry. In 2011 autumn session, the Department started M. Tech. in Polymer Science and Technology and Integrated B.Sc. B.Ed. in Chemistry. The Department has also been running a Ph.D. program covering several important areas of research in Chemical Sciences, including interdisciplinary areas.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|--|----------------|
| Integrated M.Sc in Chemistry (CI) | 25 |
| Integrated B.Sc.B.Ed in Chemistry (CD) | 13 |
| M.Sc. in Chemistry (CH) | 30 |
| Ph.D. in Chemistry (PH) | Variable |

Thrust Research Areas of the Department

- Materials for Energy & Environment
- Catalysis and Organometallic Chemistry
- Medicinal and Pharmaceutical Research
- Polymer Chemistry
- Computational Chemistry

Major Facilities/Equipment available

- 400 MHz NMR spectrophotometer, Jeol
- Thermal Analyzer, Shimadzu, (FIST Funded)
- CHN Analyzer, Perkin Elmer (FIST Funded)
- FTIR spectrophotometer, PerkinElmer
- Chemisorption Analyzer, (FIST Funded)
- Micro Extruder, thermo Fisher ((FIST Funded)
- Automated Compression Press, S5 Type, Santac
- Polarizing Microscope, Olympus,
- UV-Visible Spectrophotometer, Shimadzu,
- Universal Testing Machine, 10 KN Zwick
- Rheometer, Bohlin Instruments
- High performance computational facilities
- Digital Polarimeter
- Millipore Water Purification System
- Tabletop Magnetometer
- Single Screw Laboratory Extruder
- Cyclic Voltameter
- Cyclic Voltameter with Rotating Disk Electrode

- Atomic Absorption Spectroscopy
- Research Lab:15 Teaching Lab:9
- Computation Facilities: Teaching Lab : 01 & Research Lab : 02

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|-------------|-------------------------|--------------------------------------|--|------------------------------------|---|
| | Swapan Kumar Dolui | Ph.D. (IIT KGP) | Polymer Chemistry | dolui | 16-12-1997 |
| | Nashreen S. Islam | Ph.D. (NEHU,Shilong) | Inorganic Chemistry | nsi | 12/06/2004 |
| | Robin Kumar Dutta | Ph.D. (NEHU,Shilong) | Physical Chemistry | robind | 01/01/2009 |
| | Tarun K. Maji | Ph.D. (Calcutta University) | Polymer Science and Technology | tkm | 01/12/2005 |
| Professor | Niranjan Karak | Ph.D. (IIT- Kharagpur) | Polymer Science and Nanotechnology | nkarak | 30/03/2009 |
| | Ramesh Ch. Deka | Ph.D (NCL Pune) | Computational and Theoretical Chemistry | ramesh | 28/07/2010 |
| | Ashim J. Thakur | Ph.D. (CSIR-NEIST, Jorhat) | Organic Chemistry | ashim | 31/01/2013 |
| | Ashwini K. Phukan | Ph.D. (Hyderabad University) | Computational Inorganic/Organ ometallic Chemistry | ashwini | 10/06/2014 |
| | Ruli Borah | Ph.D.(Gauhati University) | Organic Chemistry | ruli | 19/08/2015 |
| Associate | Panchanan Puzari | Ph.D. (IIT Guwahati) | Physical Chemistry | pancha | 28/07/2018 |
| Professor | Utpal Bora | Ph.D. (CSIR-NEIST, Jorhat) | Organic Chemistry | ubora | 18/09/2019 |
| | Kusum Kumar Bania | Ph. D. (Tezpur University) | Inorganic Chemistry | kusum | 28/04/2009 |
| | Pankaj Bharali | Ph.D. (CSIR-IICT Hyderabad) | Inorganic Chemistry | pankajb | 02/08/2011 |
| | Nayanmoni Gogoi | Ph.D. (IIT, Bombay) | Inorganic Chemistry | ngogoi | 30/09/2011 |
| Assistant | Bipul Chnadra Sarma | Ph.D. (HCU) | Organic Chemistry | bcsarma | 01/06/2012 |
| Professor | Sajal Kumar Das | Ph.D. (JNU) | Organic chemistry | sajalkd | 01/02/2013 |
| | Sanjeev Pran Mahanta | Ph.D. (HCU) | Physical Chemistry | spm | 12/08/2013 |
| | Mohini Mohan Konai | PhD (JNCASR, Bangalore) | Organic Chemistry, Medicinal Chemistry | mmkonai | 25/03/2022 |

| | Plaban Jyoti | Ph.D. (Tezpur Univ) | Computational | Plaban2 | 04/09/2020 |
|------------------|---------------|----------------------|----------------|-------------|-------------|
| | Sarma | | Chemistry | | |
| | Kaushik | Ph.D. (IIT Bombay) | Physical | kaushik | 02/09/2020 |
| Crush | Talukdar | | Chemistry, | | |
| Guest Equalty | | | Theoretical & | | |
| Faculty | | | Computational | | |
| | | | Chemistry | | |
| | Sujan Kalita | Ph.D. (IIT Guwahati) | Organic/Bioche | sujankalita | 07/10/2021 |
| | | | mistry | | |
| Adjunct | М. | Ph.D. (K.U) | Inorganic | kantam | 30/04/ 2019 |
| Faculty | Lakshmikantam | | Chemistry | | |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the current position |
|----------------------------|-----------------------|-------------------------------|---|
| Technical Officer | Dr. Biren Gohain | bng | 04/03/1999 |
| Senior Technical Assistant | Dr. Biraj Jyoti Borah | biraj | 23/09/2010 |
| Technical Assistant | Dr. Raju Borah | raju | 20/08/2007 |
| | Dr. Nipu Dutta | nipu | 08/09/2010 |
| | Mr. Sankur Phukan | sankur | 13/08/2015 |
| Laboratory Assistant | Mr. Manuranjan Sarma | mranjan | 02/08/2011 |
| | Mr. Biplob Ozah | bipozah | 09/03/2017 |
| UDC | Mrs. Babita Das | bobi | 03/07/2009 |
| MTS | Mr. Khogen Ch. Das | khogen | 01/12/1994 |

Major Research and Development Findings

| Faculty/ | Salient Research Findings | | |
|-------------|---|--|--|
| Researcher | | | |
| Swapan | Improved hydrogen evolution reaction efficiency has been achieved from carbon-based | | |
| Kumar Dolui | material using metal oxide as auxiliary factor. The catalyst exhibited onset potential of | | |
| | ~ 0.115 V which is closer to that of Pt (0V). | | |
| Robin | A technology has been developed for value-added cattle urine for using an organic liquid | | |
| Kumar Dutta | fertilizer. A patent filing is in the process. | | |
| Tarun K. | Green chicken feather fiber based nanocomposites were prepared using modified soybean | | |
| Maji | oil, methacrylic acid, methacrylic anhydride and a synthesized crosslinker derived from | | |
| | naturally occurring rosin. The prepared composites exhibited an overall improvement in | | |
| | properties compared to those of styrene based composites. Layered double hydroxide was | | |
| | organically modified with CTAB and used as a nanomaterial to prepare nanocomposite | | |
| | with PVC and rice husk ash. The nanocomposite was then analyzed with various testing | | |
| | methods. Polymeric nanoparticles for controlled delivery applications were prepared as | | |
| | anti-diabatic drug. The prepared drug encapsulated nanoparticles were evaluated and | | |
| | <i>invitro</i> study is in progress. Bio-degradable composites were prepared by using coconut | | |
| | fiber and modified soybean oil. The work is in progress. | | |
| Niranjan | Development of high-performing biodegradable smart sustainable polymer | | |
| Karak | nanocomposites using renewable resources-based raw materials and various | | |
| | nanomaterials for multifaceted advanced applications including shape memory, self- | | |
| | healing, self-cleaning, tough adhesive, heterogeneous selective photo-catalyst, anti- | | |
| | counterfeiting, etc. materials, Synthesis of hyperbranched polymers from bio-based | | |
| | renewable resources, and Green and facile approaches for production of nanomaterials | | |
| | and nanohybrids. | | |
| | Development of metal incorporated ionic liquid-based system containing specific nature | | |
| Ruli Borah | like low band gap values, as oxidant and paramagnetic materials. Effect of task-specific | | |

| | ionic liquids on the surfactant properties of anionic/cationic surfactant in aqueous solution. |
|----------------------|--|
| | |
| A. K. Phukan | Studied the potential of hitherto unexplored base-stabilized borylenes in dinitrogen binding. Performed an in-depth computational study to understand the transannular $M \rightarrow Z$ interactions and studied how one can modulate and leverage such interactions. As part of a combined work, comprehensive computational mechanistic studies were carried out to understand the mechanism of cross-metathesis between diborenes and acetylenes. |
| A.J. Thakur | Encapsulation of iron oxide (Fe ₃ O ₄)-based nanoparticles (NPs) with Au NPs holds a promising scope for catalysis, which overcomes the hindrance of the inherent hydrophilic surface of iron species and facilitates the easy separation of colloidal Au NPs. As such, iron oxide-based NPs were encapsulated by Au NPs to form core–shell structures (Fe ₂ O ₄ /Au NPs) followed by further immobilization on <i>in situ</i> synthesized reduced graphene oxide (rGO) to yield Fe ₃ O ₄ /Au NPs–rGO for increased stability. Fe ₃ O ₄ /Au NPs–rGO was evaluated for the oxidation of NH-free indoles to synthesize isatins, potential precursors of SARS-CoV-2 protease inhibitors. Furthermore, the application of isatin was explored with the Fe ₃ O ₄ /Au NPs–rGO catalysed synthesis of uracil-based spirooxindoles (potential precursors of anti-cancer compounds) <i>via</i> mild reaction conditions and short reaction times with high yields. Encapsulation of iron oxide (Fe ₃ O ₄)- based nanoparticles (NPs) with Au NPs holds a promising scope for catalysis, which overcomes the hindrance of the inherent hydrophilic surface of iron species and facilitates the easy separation of colloidal Au NPs. As such, iron oxide-based NPs were encapsulated by Au NPs to form core–shell structures (Fe ₃ O ₄ /Au NPs) followed by further immobilization on <i>in situ</i> synthesized reduced graphene oxide (rGO) to yield Fe ₃ O ₄ /Au NPs–rGO for increased stability. Fe ₃ O ₄ /Au NPs–rGO was evaluated for the oxidation of NH-free indoles to synthesize isatins, potential precursors of SARS-CoV-2 protease inhibitors. Furthermore, the application of isatin was explored with the Fe ₃ O ₄ /Au NPs–rGO catalysed synthesis of uracil-based spirooxindoles (potential precursors of anti- cancer compounds) <i>via</i> mild reaction conditions and short reaction times with high yields. Au nanoparticles (NPs) of controlled morphology have been synthesized through an eco- friendly biogenic method utilizing the aqueous fruit extract of <i>Garcinia cowa</i> at room temperature. The bio extract executes dual |
| Panchanan Puzari | An electrochemical material for simultaneous detection of ascorbic acid, dopamine and uric acid in human blood and urine has been developed. A MOF-POF-MWCNT composite material for electrochemical detection of the three pesticides DNOC, thiabenzdazole and carbendazim has been developed. Eggshell nano CaCO ₃ –Polyaniline composite based molecularly imprinted sensor for uric acid determination in human blood has been developed. Studies on the complex formation reaction between creatinine and transition metals (Cu, Ag, and Co) is being carried on for development of electrochemical sensor for creatinine. |
| Kusum Kumar Bania | Developed new methodologies for the synthesis of C-2 trimer product of indole using |

| | with the previous one are the catalyst is cheaper, less toxic and provides a scope for wide |
|--------------|--|
| | range of substrates. |
| Pankaj | Design and development of Pd-based and CeO ₂ -based non-Pt electrocatalysts and their |
| Bharali | exploration toward oxygen reduction reaction, oxygen evolution reaction and formic acid |
| | oxidation reactions. The electrocatalysts exhibit excellent activity toward the above- |
| | mentioned fuel cell reactions in alkaline and acidic electrolytes. |
| Nayanmoni | Reversible pH responsive electron transfer coupled spin transition systems which switch |
| Gogoi | between paramagnetic and diamagnetic state upon acid/base addition are developed. |
| | Water processable and chiral cyanido bridged magnetic materials which show |
| | spontaneous magnetization and ferroelectric hysteresis loop are developed. By employing |
| | phosphonate functionalized Pd(II) N-heterocyclic carbene complex (NHC) as precursor |
| | ligand, we have developed a Zr-phosphonate framework with dangling Pd(II)-NHC sites |
| | which acts as a catalyst in C-C bond formation reactions. |
| Bipul | Control crystallization of drug compounds on 2-dimensional SAM surface and discovered |
| Chandra | a new polymorph of drug Sulfathiazole. Improvement of the efficacy of a few drugs with |
| Sarma | a novel multi-component formulation approach. Successfully controlled the nucleation of |
| | concomitant polymorphs of drug candidates by functional mimicking organogels |
| Sanjeev Pran | Developed a low cost metal mediated strategy for detection of fluoride ion in aqueous |
| Mahanta | medium. |
| Mohini | Development of antimicrobial compounds to combat infections |
| Mohan | |
| Konai | |

Research Projects (both Ongoing and New)

| Project Title | Funding | Amount | Duration | Investigator(s) |
|---|----------------|-------------|-----------|-----------------------|
| | Agency | (in INR) | | D 0 1 U |
| Self-healing and self-cleaning epoxy | DRDO | 28,85,000/- | 2021-2024 | Prof. Niranjan |
| thermosetting nanocomposites | | | (3 Year) | Karak |
| Design of Zeolite-Y Supported | CSIR | 25,00,000/- | 2020-2023 | Dr. Kusum K. |
| Heterogeneous Catalyst for C-C Bond | | | (3 Year) | Bania |
| Coupling Reaction | | | | |
| Design of Ship In A Bottle Complexes and | DST-SERB | 31,49,025/- | 2020-2023 | Dr. Kusum K. |
| Zeolite-Y Supported Nanocatalysts For C-Cl | | | (3 Year) | Bania |
| Bond Activation and C-C Coupling | | | | |
| Reactions. | | | | |
| Synthesis of Small Molecular Lipopeptide | Tezpur | 2,00,000/- | 2022-2023 | Dr. Mohini |
| Mimics as Novel Antibacterial Agents | University | | (1 Year) | Mohan Konai |
| Computational Investigations Towards | DST-SERB | 40,96,000/- | 2020-2022 | Prof. A. K. |
| Designing of Main Group and Transition | | | (2 Year) | Phukan |
| Metal based Systems for Dinitrogen | | | · · · · | |
| Activation | | | | |
| Directed functionalization of oxide and | DST-RFBR | 21,84,400/- | 2019-2021 | Dr. Pankaj |
| carbon nanomaterials for the development of | (Indo-Russia) | | (2 Year) | Bharali, TU, |
| efficient catalysts for carbon dioxide | | | · · · · | India and Dr. |
| conversion into value-added products | | | | M.A. |
| 1 I | | | | Kerzhentsev, |
| | | | | BIC, Russia |
| Green and sustainable catalysts based on | India-Bulgaria | 11,82,350/- | 2019-2021 | Dr. Utpal Bora |
| zeolites for oxidative transformation | Bilateral | | (2 Year) | and Dr. Pankaj |
| reactions | Scientific and | | . , | Bharali, TU, |
| | Technological | | | India |
| | Cooperation | | | And Dr. |
| | r | | | Dr.Yuri |

| | | | | Kalvachev, Institute of Catalysis, Bulgarian Academy of Sciences |
|---|---|--------------|------------------------|---|
| New functionalized biomass materials grafted with polymers for the development of novel methods for fast detection of some compounds in human blood serum and urine. | DBT-TWAS | 5,00,000/- | 2021-2022 (1 Year) | Dr. Panchanan Puzari |
| Electrode modification with advanced materials for development of electrochemical transduction based non-enzymatic creatinine sensor | Tezpur University | 50,000/- | 2021-2022 (1 Year) | Dr. Panchanan Puzari |
| Crystallization of Drugs Templated by Mimetic Organogels & Functional Surfaces | SERB-India | 29,30,400/- | 2020-2023 (3 Year) | Dr. Bipul Chandra Sarma |
| Arsenic removal from drinking water using do-it-yourself Arsiron Nilogon Method | Numaligarh Refineries Ltd. | 19,80,000/- | 2020-2021 (1 Year) | Prof. Robin Kumar Dutta |
| Design and Synthesis of Hybrid Molecules for Multi-Drug-Resistant Tuberculosis | DBT-NER- BPMC | 31,29,996/- | 2019–2022 (3 Year) | Dr Sajal Kumar Das |
| Stereoselective Synthesis of Spirocyclic Indolines | SERB-DST | 45,91,400/- | 2018–2021 (3 Year) | Dr Sajal Kumar Das |
| Switchable molecular magnetic materials | SERB | 38,21,000/- | 2021-2024 (3 Year) | Dr. Nayanmoni Gogoi |
| pH responsive switchable cyanido bridged Co-Fe molecular aggregates | CSIR | 24,64,000/- | 2021-2024 (3 Year) | Dr. Nayanmoni Gogoi |
| Development of Cu(II) mediated strategy for sensing of fluoride anion in aqueous medium | CSIR | ~20,00,000/- | 2019-22 (3 Year) | Dr. Sanjeev Pran Mahanta |
| UGC-BSR Mid-Career Award | UGC | 10,00,000/- | 2 years | Prof. S. K. Dolui |
| Tuning Metal Oxide Clusters for Selective Catalytic Hydrogenation of CO ₂ to Organic Acids using Quantum Chemical Methods | Science & Engineering Research Board (SERB), CRG/2020/00 2158 | 29,48,060/- | 2021-2024 (3 Year) | Prof. Ramesh Ch. Deka |
| UGC-CARE Journals | University Grant Commission, New Delhi, | 25,00,000/- | 2019-2024 (3 Year) | Prof. Ramesh Ch. Deka |
| Mechanochemical Synthesis of Pharmaceutical Solid Forms to Avoid Degradation of Moisture Sensitive Active Pharmaceutical Ingredients using combined computational and experimental crystal engineering approaches, | Engineering Research Board (SERB), New Delhi, | 10, 05,000/- | 2022-2025 (3 Year) | Prof. Ramesh Ch. Deka |
| Bioinformatics and Computational Biology Centre for Microbial Biodiversity in Assam and Arunachal Pradesh. | Department of Biotechnolog, Government of India, New | 75,00,000/- | 2022-2025 (3 Year) | Prof. Ramesh Ch. Deka |

| | | Delhi | | | |
|--|--|-------|--|--|--|
|--|--|-------|--|--|--|

Publications by Faculty

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Morang, S., Biswakarma, N., Deka, R. C., and Karak, N. (2022). Citric acid/glycerol ester, a backup of 2, 2-bis (hydroxymethyl) propionic acid and biobased synthesis of anionic polyurethane dispersion. *Progress in Organic Coatings*, 168: 106880.
- Sarmah, D. and Karak, N. (2022). Physically cross-linked starch/hydrophobically-associated poly(acrylamide) self-healing mechanically strong hydrogel. *Carbohydrate Polymers*, 289: 119428.
- Sarmah, D. and Karak, N. (2022). Starch based mechanically tough hydrogel for effective removal of toxic metal ions from wastewater. *Journal of Cleaner Production*, 344: 131074.
- Kundu, S. and Karak, N. (2022). Polymeric photocatalytic membrane: An emerging solution for environmental remediation. *Chemical Engineering Journal*, 438: 135575.
- Dutta, G. and Karak, N. (2022). Bio-based waterborne polyester/cellulose nanofiber-reduced graphene oxide–zinc oxide nanocomposite: an approach towards sustainable mechanically robust anticorrosive coating. *Cellulose*, 29:1679–1703.
- Borah, N. and Karak, N. (2022). Tannic acid based bio-based epoxy thermosets: Evaluation of thermal, mechanical, and biodegradable behaviors. *Journal of Applied Polymer Science*, 139(11): 51792.
- Boruah, K., Bora, D. B., Saikia, S. and Borah, R. (2022). Study of photocatalytic properties of clay intercalated semiconductor composite material of guanidinium tetrachloroferrate for oxidative degradation of model dye in sunlight. *Journal of Material Sciences: Materials in Electronics*, 33:2461–2478.
- Gogoi, G., Chowdhury, C. and Maji, T.K. (2022). Hybrid Bio-based Composites from Waste Chicken Feather and Betel Nut Fiber: A Study on the Mechanical and Thermal Properties. *Journal of Bionic* Engineering, 19: 268–277.
- Gogoi, G., Thakur, A. J., & Maji, T. K. (2021). Effect of Natural Crosslinker on the Properties of Chicken Feather and Modified Vegetable Oil Based Green Composites. *Journal of Natural Fibers*, 1-13.
- Dutta, N., Hazarika, S., & Maji, T. K. (2021). Study on the role of tannic acid–calcium oxide adduct as a green heat stabilizer as well as reinforcing filler in the bio-based hybrid polyvinyl chloride–thermoplastic starch polymer composite. *Polymer Engineering & Science*, 61(9): 2339-2348.
- Dutta, N., & Maji, T. K. (2022). Development of waste rice husk/PVC/GO nanocomposite using TA-CaO adduct and ESO as green additives. *Journal of Thermoplastic Composite Materials*, 08927057211063398.
- Dutta, N., & Maji, T. K. (2022). Development of waste rice husk/PVC/GO nanocomposite using TA-CaO adduct and ESO as green additives. *Journal of Thermoplastic Composite Materials*, 08927057211063398.
- Dutta, N., Bhadra, B., Gogoi, G., & Maji, T. K. (2021). Development of polyvinyl chloride/waste rice husk ash/modified montmorillonite nanocomposite using epoxidized soybean oil as green additive substituting synthetic plasticizer and compatibiliser. *Cleaner Materials*, 2: 100033.
- Gogoi, G., Saikia, P., Baruah, M. J., Lee, S. Park, Y. B., Dutta, R., and Bania, K. K. (2021). Mixed valent copper oxide nanocatalyst on Zeolite-Y for mechanochemical oxidation, reduction and C–C bond formation reaction. *Microporous and Mesoporous Materials*, 326:111392.

- Baruah, M. J., Bora, T. J., Dutta, R., Roy, S., Guha, A. K. and Bania, K. K. (2021). Fe (III) superoxide radicals in halloysite nanotubes for visible-light-assisted benzyl alcohol oxidation and oxidative C-C coupling of 2-naphthol. *Molecular Catalysis*, 515:111858.
- Hoque, N., Baruah, M. J., Lee, S. Park, Y. B., Dutta, R., Roy, S., and Bania, K. K. (2021). Cu (OH)₂-Ni (OH)₂ engulfed by zeolite-Y hydroxyl nest and multiwalled carbon nanotube for effective methanol oxidation reaction. *Electrochimica Acta*, 397:139313.
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- Deka, R. C., Saikia, S., Biswakarma, N., Gour, N. K., and Deka, A. (2022). Nanocatalysts for exhaust emissions reduction. In Nanotechnology in the Automotive Industry (pp. 511-527). Elsevier.

Publication of Articles in Other Forms

• Dutta R. K. (2021) Ramrai Kuthir Prachin Bhaskarjar Duravastha, in Dainik Asom Sunday Supplement 24 Oct, Page 14.

| Name of Faculty/Staff Member | Purpose of Attending | | Date/ Period | Organizer and Venue (Online/Offline) |
|------------------------------------|--|---|---|--|
| Prof. Niranjan Karak | Chairman | One-Day Consultative Workshop On Research And Developments In Heis With Stakeholders Of North-Eastern Regions To Obtain Feedback/Suggestions | 18 -11- 2021 | Tezpur University, India |
| Dr. Pankaj Bharali | Convener | National Conference On Sustainability, Medicine And Clean Energy | 01-03-2022 | Department of Chemical Sciences, Tezpur University (Online) |
| Dr. Bipul Chandra Sarma | Chairing session | International Conference On Progress And Challenges In Modern Day Science (PCMDS-2021) | 17-06-2021 to 18-06- 2021 | Department of Chemistry, B. Borooah College, Guwahati |
| Dr. Bipul Chandra Sarma | External Examiner | Research Progress And Review Committee Member Of Phd Student Of Ioc-Ict Mumbai | 12-04-2021 | IOC-ICT, MUMBAI (Bhubaneswar Campus) |
| Dr. Bipul Chandra Sarma | Resource Person cum evaluator | 29 th National Children's Science Congress, 2021 | 06-08-2021 to 08-08- 2021 | ASTEC Assam |
| Prof. Ramesh Ch. Deka | Chairing session | Computational Approaches for Designing Heterogeneous Catalysts and Drug Molecules, Frontiers in Computational Chemistry- 2022, | 10-03-2022 to 11-03- 2022 | Central University Of Kerala |
| Prof. Ramesh Ch. Deka | Chair person | National Conference on Molecular Modelling and Simulations (NCMMS2022). | 28 -02-2021 to March 02- 03-2022. | VIT Bhopal University |
| Prof. Ramesh Ch. Deka | Chair person | Mechanism of CO Oxidation over Zeolite Supported Pd ₄ Catalyst Using QM/MM Method, Current Trends in Theoretical Chemistry (CTTC- 2020), | 23-09-2021 to 25-09- 2021. | Bhabha Atomic Research Centre, Mumbai. |

Conference/Workshop/Symposium/Seminar etc. Attended

Invited Talk

| Name of Faculty Member | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|------------------------------|---|---|---------------------------------|--------------------------|
| Prof. Niranjan Karak | Plastics Waste Management- Waste to wealth Concept | Polymer and the probable remedial approaches for waste plastic materials, in Short Term Training Program (STTP)) | 21-03-2022 to 25-03- 2022 | CIPET: CSTS- Guwahati |

| [[| Polymer Matrix based | Polymer matrix based | 07-03-2022 | CIPET: CSTS- |
|-------------|--|--|-------------------------|------------------------------|
| | Nanostructures for Targeted | nano-structural materials | to 11-03- | Guwahati |
| | Drug Delivery Application | for biomedical | 2022 | |
| | | applications | | |
| | Sustainable polymer | Sustainable polymer | 23-12-2021 | ICNT-2021, |
| | nanocomposites for | nanocomposites for | to 24-12- | Haldia, India |
| | multifaceted advanced | multifaceted advanced | 2021 | |
| | applications | applications | | |
| | Plastic Product Manufacturing | Sustainable Polymers and | | |
| | & Recycling Techniques | their Nanocomposites for | 19-07-2021 | CIPET: CSTS- |
| | | different advanced | to 23-07- | Guwahati, |
| D V | <u> </u> | Applications | 2021 | Assam |
| Dr. Kusum | Synthesis of Biologically | 28 th CRSI National | 27-03-2022 | Organized by |
| K. Bania | active C2 Trimerized Indoles and Isatins using Fe(III) Catalyst | Symposium In Chemistry At Iitg | | CRSI at IITG |
| Prof. | Macromolecular metal | National Science Day | 28.02.2022 | Institute of |
| | complexes as potent enzyme | | | Advanced |
| | inhibitors and bioinspired | | | Science and |
| | catalysts | | | Technology, |
| - | | | | Guwahati |
| | Empowering women-Women | International Women's | 8.03.2022 | CSIR-NEIST, |
| | in Science | Day Celebration | | Jorhat |
| * | X-Ray Diffractometer | Training Program On | 10-03-2021 | Sophisticated |
| Chandra | | Analytical Instruments | | Analytical |
| Sarma | | | | Instrumentation |
| | | | | Center, Tezpur University |
| | | | | University |
| | Guiding Crystallization Events | | 17-06-2021 | Department of |
| | By Functional | On Progress and | | Chemistry, B. |
| | Monolayers/Organogels | Challenges in Modern | | Borooah |
| | | Day Science (PCMDS- | | College, |
| | | 2021) | | Guwahati |
| | Hybrid Medicines: A Solid | National Webinar On | 28-07-2021 | Sadia College, |
| | States Approach | Evolving Areas Of | to 29-07- | Assam |
| | | Chemical Sciences In | 2021 | |
| | | Shaping Our Everyday | | |
| | | Life Webings Series of | 20 10 2021 | Devel Cl-1 |
| | Engineering Urbrid | Webinar Series of | 30-10-2021 | Royal Global |
| | Engineering Hybrid Medicines: A Solid States | Chemistry Department, RGU | | University, Guwahati, |
| | medicines. A Sond States | NUU | | , |
| | Approach | | | Accam |
| | Approach State Level Resource Persons | National Children's | 04-07-2021 | Assam |
| | State Level Resource Persons | National Children's Science Congress Assam | 04-07-2021 to 16-07- | ASTEC, |
| - | State Level Resource Persons Training Workshop For | National Children's Science Congress, Assam | to 16-07- | ASTEC, Guwahati |
| - | State Level Resource Persons Training Workshop For National Children's Science | | | ASTEC, |
| | State Level Resource Persons Training Workshop For National Children's Science Congress, Assam | | to 16-07- | ASTEC, Guwahati |
| - | State Level Resource Persons Training Workshop For National Children's Science Congress, Assam [Total 4 talks delivered in four | | to 16-07- | ASTEC, Guwahati |
| | State Level Resource Persons Training Workshop For National Children's Science Congress, Assam [Total 4 talks delivered in four sessions] | | to 16-07- | ASTEC, Guwahati Assam |
| Prof. Robin | State Level Resource Persons Training Workshop For National Children's Science Congress, Assam [Total 4 talks delivered in four | Science Congress, Assam | to 16-07- 2021 | ASTEC, Guwahati |

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| | | agenda at the local level | | Airmeet |
|------------|------------------------------|---------------------------|-------------|---------------|
| Prof. | Usefulness of Polymer | Workshop on polymer | 20/01/2022 | Dhekiajuli |
| Swapan | | synthesis and | | College |
| Kumar | | characterization | | |
| Dolui | | | | |
| Prof. | "Recent Innovation in | Workshop on | 22/12/2021. | RKDF |
| Ramesh Ch. | Multidisciplinary Research", | Multidisciplinary | | University, |
| Deka | | Research | | Ranchi. |
| | "UGC-CARE: Publications | UGC-CARE Workshop | 18/12/2021. | B N College, |
| | Ethics in Research" | | | Dhubri. |
| | | | | |
| | "Good Academic and | Lecture on "Good | 15/12/2021. | Tezpur |
| | Research Practices" | Academic and Research | | University. |
| | | Practices'' | | |
| | "Opportunities of Doing | Popular Talk | 26/11/2021. | Duliajan |
| | Science" | | | College. |
| | | | | |
| | "UGC-CARE" UGC-HRDC | ''UGC-CARE" UGC- | 25/06/2021 | Devi Ahilya |
| | in the Faculty Development | HRDC in the Faculty | | Vishwavidyala |
| | Programme in Research | Development | | ya, Indore. |
| | Methodology for Science | Programme | | |
| | Faculty. | | | |
| | "Harmful Effects of Drinking | A Popular Talk on | 10/06/2021 | Gargaon |
| | Alcohols" | "Chemistry of Alcohol: | | College. |
| | | Weighing Risks and | | |
| | | Benefits '' | | |

Awards/Honours/Notable Achievements

| Name of Awardee | Designation of Awardee | Achievement | Event/Awarded by |
|-------------------------------|---------------------------|---|--|
| Prof. Niranjan | Faculty member | Listed among the world scientists in AD Scientific Index (Alper-Doger), (University 1, Country 383, and world 44251among more than 7 lakh scientists in 190 countries), 2022 | AD Scientific Index (Alpha-Doger) |
| Karak | Faculty member | Appointed as Co-Chair, Expert Committee- Biotechnology carrier advancement & re- orientation programme (BioCARe)- Bioengineering and biomaterials area, 2022-2025 | Department of Biotechnology, New Delhi |
| Prof. N.S.Islam | Faculty member | Appointed Member of Selection Committee for SERB-International Research Experience programme (SIRE) for the year 2022. | DST-SERB |
| Dr. Bipul Chandra Sarma | Faculty member | Editorial Board Member | Journal of Pharmaceutical Science (Elsevier) |
| Ms. Suranjana Patowary | Research Scholar | Commonwealth Split-site Fellowship, United Kingdom | UK Foreign Commonwealth and Development Office |
| Ms. Arpita Devi | Research Scholar | DST-INSPIRE Fellow for pursuing Ph.D. | DST-INSPIRE, Govt. of India |

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|--------------------------|
| NET-JRF-LS | 11 | Ph.D./ M.Sc./ Int. M.Sc. |
| GATE | 20 | Ph.D./ M.Sc./ Int. M.Sc. |

Notable Placement of Students

| Name of Student | Academic | Placement | Company/ Organization | Mode of |
|--------------------|------------|----------------------|---------------------------------------|------------|
| | Programme | Designation | | Selection |
| Dr. Pranita Bora | Ph.D. (TU) | Assistant Professor | Nalbari College, Assam | Off-campus |
| Dr. Rajiv Khatioda | Ph.D. (TU) | Assistant Professor | Sadia College, Assam | Off-campus |
| Dr. Kiran Mohan | Ph.D. (TU) | Assistant Professor | Rangapara College, Assam | Off campus |
| Dr. Simanta Doley | Ph.D. (TU) | Assistant Professor | Jengraimukh College, Jorhat, Assam | Off campus |
| Dr. Junali | Ph.D. (TU) | Lecturer (part time) | Residential girls' Polytechnic, | Off campus |
| Handique | | | Golaghat | |
| Dr. Jayashree Nath | Ph.D. (TU) | Associate Chemist | Sea6 Energy Pvt. Ltd. | Off campus |
| | | R&D | | |
| Dr. Plaban J. | Ph.D. (TU) | Assistant Professor | Gargaon College | Off-Campus |
| Sarma | | | | |
| Dr. Saheen S. | Ph.D. (TU) | Assistant Professor | Gargaon College | Off-Campus |
| Begum | | | | |
| Satyajit D. Boruah | Ph.D. (TU) | Assistant Professor | Lumding College | Off-Campus |
| Partha P. Churi | M.Sc. | Assistant Professor | DKD College, Dergaon | Off-Campus |
| Dibyangana Sarma | M.Sc. | Assistant System | TCS, Bengaluru | Off-Campus |
| | | Engineer | | |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student Academic | | Name of other Institute | Enrolled Academic |
|--------------------------|-------------------|----------------------------------|--------------------------|
| | Programme (in TU) | | Programme |
| Dr. Aditi Saikia | Ph.D. | IASST, Guwahati, Assam | Post-Doc |
| Dr. Tuhin Ghosh | Ph.D. | LUT University, Finland | Post-Doc |
| Dr. Deepshikha Hazarika | Ph.D. | Trinity College, Dublin, Ireland | Post-Doc |
| Dr. Rituparna Duarah | Ph.D. | Kyungpook National University, | Post-Doc |
| | | Republic of Korea | |
| Dr. Mitu Sharma | Ph.D. | Missisipi State University, USA | Post-Doc |
| Dr. Basanta Saikia | Ph.D. | Max Planck Institute, | Post-doc |
| | | Magdeburg, Germany | |
| Ms. Parineeta Gogoi | M.Sc. | IISc, Bengaluru | Ph. D. |

DEPARTMENT OF ENVIRONMENTAL SCIENCE

About the Department

Initially established as a Centre for Environmental Science in 2003, the Centre was converted to the Department of Environmental Science in 2004, with the objective of imparting education on regional and global environmental issues. The curriculum for the M. Sc. Programme focuses on all important aspects of Environmental Science, covering contemporary problems of natural resource conservation and environmental quality. The areas of research of the Department include, Atmospheric processes, Environmental pollution, Greenhouse gas emission, Riverine hazards, Hydrogeochemistry, Geomorphology, Vulnerability & adaption, Natural hazards, Climate change and its impacts on agroecosystem and forest ecosystem, Plant-insect interactions, Nanotechnology in environmental research, Waste management, Vermicomposting, Pollution remediation, Ecosystem dynamics, Biodiversity conservation and Atmospheric system modeling.

The Department is a recipient of a grant under UGCSAP and DST-FIST.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|--------------------|----------------|
| M. Sc. | 35 |
| Ph.D. | Variable |

Thrust Research Areas of the Department/Centre

- Environmental Assessment and Modelling
- Biodiversity and hydro-geomorphic studies
- Climate change dynamics, sustainable agriculture, and vulnerability assessment

Major Facilities/Equipment available

- Inductively Coupled Plasma Mass Spectrophotometer (ICP-MS)
- Carbon Hydrogen Nitrogen and Sulphur Analyzer (CHNS)
- High-performance Liquid Chromatography (HPLC)
- Ion Chromatography (IC)
- High Performance Computing Systems (HPC)

Some of the other instruments house in the laboratories of the department includes Laser Leaf Area Meter with Root Measurement Attachment, Portable Photosynthesis Systems, Gas Chromatograph, TOC Analyzer, ELISA Reader, Aquaculture facility, Continuous Air Pollution Monitoring Station, UV-Visible Spectrophotometer, Ion meter, Repairable dust sampler with gaseous sampling attachment, High Speed Refrigerated Centrifuge, Sartorius RO System, Sartorius Ultra-Pure Water Purification System, HOBO Pro V2 Tea/RH data logger, Flame Photometer, Electrophoresis gel unit and Fluorescence Microscope with Camera & Software. Department also have GIS laboratory facilitate with Arc GIS Master Lab Kit and ERDAS Software and plant culture house.

Faculty Members

| Designation | Name | Highest Qualification | Specialization | <email> @tezu.ernet.in</email> | Date of holding the |
|-------------|------|--------------------------|----------------|------------------------------------|------------------------|
| | | (Institute) | | | current |

| | | | | | position |
|------------------------|------------------------------|-----------------------------------|---|-----------|--|
| | Raza Rafiqul Hoque | Ph. D. (JNU, New Delhi) | Atmospheric Chemistry, Pollution Monitoring and Assessment | rrh | 24/09/2013 |
| Professor | Apurba Kumar Das | Ph. D. (JNU, New Delhi) | Geomorphology, Regional Climate | apurba | 25/08/2016 |
| Associate Professor | Ashalata Devi | Ph. D. (NEHU, Shillong) | Forest ecology and biodiversity conservation | kh_asha | 06/01/2017 |
| | Nirmali Gogoi | | Environmental Physiology of Plants (Stress Physiology); Greenhouse Gas Emission and Carbon Sequestration from Agro- Ecosystem and Forest Ecosystem | nirmali | 31/03/2009 |
| Assistant Professor | Satya Sundar Bhattacharya | Ph.D. (Visva- Bharati) | Solid waste recycling; vermicomposting; soil health; organic agriculture; nanomaterials in environment | satya72 | 01/09/2010 |
| | Sumi Handique | Ph. D. (Tezpur University) | Geochemistry | sumihan | 06/10/2010 |
| | Amit Prakash | Ph. D. (JNU, New Delhi) | Environmental System Modelling; Machine learning applications in Environmental Systems; Non-stationary Stochastic Models; Neuro-fuzzy Systems | ap | 17/04/2013 |
| | Nayanmoni Gogoi | Ph. D. (IIT Guwahati) | Ecohydrology, Ecosystem Functions, Nanomaterials in Environmental Applications | nayanmoni | 23/01/2017 |
| | Santa Kalita | Ph. D. (Gauhati University) | Zoology (Entomology), Plant- Insect interface, Pollution Biology and Health | santa | 03/03/2017 |
| | Pratibha Deka | Ph. D. (Tezpur University) | Air pollution, Human- Environment interaction | pratibha | 21/08/2017 |
| Guest | Nazrin Ullah | Ph.D. (NIT, Silchar) | Flood modeling, Flood forecasting, ANFIS, ARIMA Modeling, Water Pollution | nazrin | 14/08/2019 (Renewed periodically |
| Faculty | Madhumita Ghosh Datta | Ph.D. (Tezpur University) | Rice ecosystems, soil science, solid waste management and biodiversity | mghosh | 12/02/2020 (Renewed periodically |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the current position |
|---------------|-----------------|-------------------------------|--------------------------------------|
| <i>S.T.A.</i> | Pranjol Goswami | pranjol | 16/10/2010 |
| Т.А. | Jayanta Bora | jborain | 10/10/2010 |
| <i>U.D.C.</i> | Anup Dutta | dutta12 | 2020 |
| <i>M.T.S.</i> | Ranjit Bora | ranjit2 | 2000 |

Major Research and Development Findings

| Faculty/ | Salient Research Findings |
|--------------|---|
| Researcher | |
| Satya Sundar | Dr. Bhattacharya has pioneering contributions in (i) revealing novel pathways of heavy |
| Bhattacharya | metal detoxification by earthworms; (ii) developing microbial formulations and |
| | vermitechnology for transforming solid wastes as potential components of organic- |
| | centric agriculture; (iii) developing ecofriendly nanofertilizers; and (iv) revealing how |
| | soil attributes regulate medicinally valuable plant metabolites and their genes |
| Prof. Raza R | (1) In a pioneering study of the O_3 -NO _x photostationary state (<i>PS</i>) in the ambient air of |
| Hoque | Brahmaputra Valley was studied and it was found that the <i>net</i> O₃ concertation deviated substantially from the <i>PS</i> during the winter months, which was attributed to local biomass burning, biogenic VOC emission from forest and agriculture, and long-range transport of peroxyacyl nitrate (PAN). The HYSPLIT model application and concentration-weighted trajectory (CWT) analyses of O₃ ascertained contribution of long-range pollutants in the O₃ chemistry of the region. (2) In a successful attempt bioaccumulation of metals by <i>Atrichum angustatum</i>, which is a readily available moss species in the Brahmaputra valley, was studied. The study led to the conclusion that <i>A. angustatum</i> can serve as a potential biomonitor for metallic pollutants. |

Research Projects (both Ongoing and New)

| Project Title | Funding Agency | Amount (in INR) | Duration | Investigator(s) |
|---|---------------------------------------|----------------------|---------------------------------|---|
| Earthworm Gut Microbes Mediated Carcinogenic Polycyclic Aromatic Hydrocarbons (CPAHs) Remediation in Contaminated Soil Exploration of Biodiversity and conservation issues of Talley Valley Wildlife sanctuary, Arunachal Pradesh with reference to wildlife species distribution along climate and topographical gradients | DBT | 3384600 38,96,640 | 2018- 2021 2016 - 2021 | Raza R Hoque (PI) Nayanmoni Gogoi (Co-PI) Ashalata Devi (PI) |
| Quantitative assessment and mapping of plant diversity and biological resources in Upper and Lower Assam | DBT | 78,49,000 | 2018- 2021 | Ashalata Devi (Co-PI) |
| Exploring Wildlife and Nature Based Tourism as a Potential Livelihood Option for Local People inhabiting in and around the Protected Areas in Eastern Himalayas, Arunachal Pradesh: A Sustainable approach for biodiversity conservation | MoEFandCC -NMHS (GBPNIHES D) | 45,00,295 | 2018 - 2021 | Ashalata Devi (Co-PI) |
| Status survey and potential threats of threatened Mishmi Takin (<i>Budorcastaxicolor</i>) and its conservation through sensitization of | IERP- GBPNIHESD | 9,97,480 | 2018- 2021 | Ashalata Devi (Co-PI) |

| local communities in eastern Arunachal | | | | |
|---|-------------------------------|-------------|---------------|---|
| Pradesh, India Enumeration and valuation of the Economic Impact of female labour in the Hills: A study of Indian Himalayan region | UGC (Assigned by NITI | 1,45,000 | 2021- 2022 | Ashalata Devi (Co-PI) |
| or moran rinnandyan rogion | AAYOG) | | | |
| Climate Change Impacts and Adaptation for a Climate Resilient Northeast India | DST's Centre of Excellence | 6,35,65,808 | 2020-2025 | Ashalata Devi (PI) Co-PI(s): D.C. Baruah, R R Hoque, A.K. Das, N.Gogoi, S. Handique, A. Prakash |
| Climate Change Action Programme (CCAP) scheme Long Term Ecological Observation project (LTEO) -India Three project 1.Monitoring forest structure and dynamics in relation to climate change across different biogeographic zones of India 2.Long-term monitoring of biodiversity and ecosystem processes in Indian grasslands 3.Long-term monitoring of soil processes in forests and grasslands. | MoEF and CC | 45,00,000 | 2020-2025 | Ashalata Devi (Co-PI) |
| Harnessing Endophytes and Arbuscular Mycorrhizal Fungifrom Citrus microbiome for plant and soil health Management in North East India | DBT | 20,82,120 | 2021- 24 | Nirmali Gogoi (PI) |
| Rapid in-situ conversion of urban solid wastes to valuable manure by vermicompost derived microbial consortia: Insights on earthworm gut aided microbial detoxification mechanism of metals, pesticide, and pharmaceutical residues | SERB | 43,00,000 | 2022- 2025 | Satya Sundar Bhattacharya (PI) and Nayanmoni Gogoi (Co-PI) |
| Ecohygrological assessment of eutrophicated water bodies - monitoring algal blooms (algal toxins), water quality and developing techniques to reduce eutrophication | SERB | 26,21,000 | 2019- 2022 | Nayanmoni Gogoi (PI) |
| Exploiting chemical ecology for IPM: Deciphering the phyto- semiochemicals involved in Insect-Plant interactions of major crop pests of North East Region-India | DBT | 54,92,820 | 2021- 2024 | Santa Kalita (Co-PI) |
| Assessment of indoor air quality in different indoor environments and prevalence of sick building syndrome | UGC | 10,00,000 | 3 years | Dr. Pratibha Deka (PI) |
| Study of shifting cultivation and associated problems in Meghalaya: physicochemical and geospatial approach | DST-SERB | 35, 49,620 | 3 years | Dr. Pratibha Deka (PI) |

Publications by Faculty and Staff Members Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Hussain, S., and Hoque, R. R. (2022). Biomonitoring of metallic air pollutants in unique habitations of the Brahmaputra Valley using moss species—*Atrichumangustatum:* Spatiotemporal deposition patterns and sources. *Environmental Science and Pollution Research*, 29(7), 10617-10634.
- Ahmed, M., Bhuyan, P., Sarkar, S., and Hoque, R. R. (2022). Seven-year study of monsoonal rainwater chemistry over the mid-Brahmaputra plain, India: assessment of trends and source regions of soluble ions. *Environmental Science and Pollution Research*, 29(17).
- Gogoi, D., Sazid, A., Bora, J., Deka, P., Balachandran, S., and Hoque, R. R. (2021). Particulate matter exposure in biomass-burning homes of different communities of Brahmaputra Valley. *Environmental monitoring and assessment*, 193(12), 1-17.
- Pal, M., Gope, M., Basu, A., Laha, T., Masto, R. E., Labar, R., Kundu, T.K., Hoque, R.R., Khillare, P.S., Balachandran, S. (2021). Indoor Quality of Residential Homes and Schools of an Industrial Area in Asansol: Characterization, Bioaccessibility and Health Risk Assessment of Potentially Toxic Elements. Nature Environment and Pollution Technology, 20(1), 13-28.
- Rahman, W., Beig, G., Barman, N., Hopke, P. K., and Hoque, R. R. (2021). Ambient ozone over mid-Brahmaputra Valley, India: effects of local emissions and atmospheric transport on the photostationary state. *Environmental monitoring and assessment*, *193*(12), 1-17.
- Deka, P., Medhi, C., Bhuyan, P., Gope, M., Balachandran, S., and Hoque, R. R. (2022). Understanding exposure risks of women and children to PAHs in biomass using households of Brahmaputra valley. *Journal of Air Pollution and Health*, 7(1):33-50.
- Bidyut Sarania, Awadhesh Kumar, Kuladip Sarma, Bhupen Singh Brahma, Himolin Basumatary and Ashalata Devi. 2021. A comparative assessment of external morphological traits between *Macaca munzala*, Tawang and *Macaca assamensis*, Goalpara population in Northeast India. *Primates*, 62:343-360.
- Gunjana Chaudhury, Mallika Basumatari, Chandra Bahadur Darji, Afrin Firdouz Ahmed, Darshana Borah, Rajesh Kumar Sah, Ashalata Devi, Nabajit Hazarika and Gitamani Dutta. 2021. Economic significance of wild bioresources to rural communities in the Eastern Himalayan state of Assam, Northeast India. *Trees, Forests and People*, 5:100102.
- Baidya, S., Thakur, B. and Devi, A. 2021. The influence of tree population structure on regeneration potential in the sacred forests of Assam, India. *Tropical Ecology*, 63: 239–251.
- Gisandu K. Malunguja, Bijay Thakur and Ashalata Devi. 2021. Relationship between forest biodiversity attributes and potential carbon stocks in dry tropical reserve forests of Assam, northeast India. *Environmental and Experimental Biology*, 19: 231–243.
- Mayanglambam Bidyalakshmi Devi, Dangsawa Pipa Morwadun Maring and Ashalata Devi. 2022. A new distribution record and conservation plea of parasitic angiosperm, *Sapriahimalayana* Griffith in Manipur. *Journal ofBioresearch* 1(1): 79-83.
- Gisandu K. Malunguja and Ashalata Devi. 2022. Quantitative Assessment and Predicting the Effects of Soil Pollutants on Herbaceous Biomass Production in Reserved Forests. *Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci.*, 92(1):105–120.
- Gisandu K. Malunguja, Bijay Thakur and Ashalata Devi. 2022. Heavy Metal Contamination of Forest Soils by Vehicular Emissions: Ecological Risks and Effects on Tree Productivity. *Environmental Processes*, 9:33.
- Mondal, Subham, Sarma, Banashree, Narzari, Rumi, Gogoi, Lina, Kataki, Rupam, Garg, Ankit and Gogoi, Nirmali. (2022). Role of pyrolysis temperature on application dose of rice straw biochar as soil amendment. *Environmental Sustainability*. DOI 10.1007/s42398-022-00217-w.

- Chakraborty, S.; Deb Burman, P.K., Sinha, N., Sarma, D.Metya, vA, Nurkute, C., Gogoi, N. Bora, A., Saha, S.Maji, D.K.Parua and S. Bera (2022) Linkage between precipitation isotopes and biosphere-atmosphereinteraction observed in northeast India. npj *Climate and Atmospheric Science* DOI 10.1038/s41612-022-00231-z
- Deb Burman, P.K., Chakraborty, S. El-Madany, T.S., Ramasubramanian, R., Gogoi, N., Gnanamoorthy, P., Charuta Murkute, S, Nagarajan, R., Karipot, A. (2022) A comparative study of ecohydrologies of a tropical mangrove and a broadleaf deciduous forest using eddy covariance measurement, *Meteorology and Atmospheric Physics*, 134:1, 1-22.
- Sarma, D., Deb Burman, P.K., Chakraborty, S. Gogoi, N., Bora, A., Metya, A., Datye, A., Murkute, C. Karipot, A.(2022) Quantifying the net ecosystem exchange at a semi-deciduous forest in northeast India from intra-seasonal to the seasonal timescale. *Agricultural and Forest Meteorology*, 314,108786.
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- Datta G. M. (2021). Blended Amendments: A Sustainable Approach for Managing Nutrient Deficiency in Rice Fields. Environmental and Natural Resource DOI:http://dx.doi.org/10.32526/ennrj/19/202100032

Publication of Books

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- Hussain, S., and Hoque, R. R. (2022). Ecological and Natural-Based Solutions as Green Growth Strategies for Disaster and Emergency Management of Air Pollution Extremes. In *Extremes in Atmospheric Processes and Phenomenon: Assessment, Impacts and Mitigation,* pages 369-395. Springer, Singapore
- Sarma,B,Gogoi,L;Gogoi,N. and Kataki,R. (2022) Crop plants under metal stress and its remediation In Plant Stress: Challenges and Management in the new decades; Springer, DOI http://dx.doi.org/10.1007/978-3-030-95365-2_3
- Gogoi,L; Narzari,R; Chutia,R.S.;Borkotoki, B; Gogoi,N; Kataki, R.(2021).Remediation of heavy metal contaminated soil: Role of biochar In Advances in chemical pollution, environmental management and protection; Elsevier DOI 10.1016/bs.apmp.2021.08.002.
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- Deka, P, Handique, S., Kalita, S., and Gogoi, N. (2021). Recycling of Agro-Wastes for Environmental and Nutritional Security. In: Bhatt, R., Meena, R.S., Hossain, A. (eds). *Input Use Efficiency for Food and Environmental Security*, pages 605-626. Springer, Singapore. https://doi.org/10.1007/978-981-16-5199-1_20
- Nath, A., and Deka, P. (2022). A Case Study on Practices and Acute Toxicity Symptoms Associated with Pesticide Use Among the Farmers of Mid Brahmaputra Valley of Assam. In:Singh, V.P., Yadav, S., Yadav, K.K., Yadava, R.N. (eds.) *Environmental Degradation: Challenges and Strategies for Mitigation*, pages 329-344. Springer, Cham.
- Prajnyan Sarma and Ashalata Devi (2021). Alien plant invasion in the Himalayan region: A review. In: Biological spectrum of Northeast India. Vol. I (Ed. H. C. Majundar). Eastern Book House (EBH) Publishers, Guwahati, India. Pages 1-10. ISBNNo.: 978 93 90434 19 0 www.easternbookhouse.in
- Das, S., Goswami, L., Bhattacharya, S. S.*, Mandal, N.C. (2021). Bio-based technologies to combat emerging environmental contaminants. (P. Singh, C.M. Hussain and S. Rajkhowa, Eds), Chapter 12, pp-323-356 Elsevier (ISBN:978-0-12-822263-8).

Publication of Articles in Conference Proceedings

- Talukdar, O., Gogoi, N., and Bhattacharya, S.S. (2022). Alternate Wet and Dry Irrigation (AWDI) technology as a sustainable water management tool. In *International Conference on Advances in Energy, Environment for Sustainable Development* (AEESD -2022), pages 52-53, Bhubaneswar, Odisha, India.
- Das, K.P. and Gogoi, N. (2021). Efficiency of green synthesized nanoparticles embedded in activated charcoal over chemically synthesized metallic nanoparticles for wastewater remediation. In *International Conference on Impacts and amp; Consequences of Environmental Degradation on Animal Health and Human Wellbeing*, page 09, Bongaigaon, Assam, India

Publication of Articles in Other Forms

• World Environment Day 2021: What is ecosystem restoration, and the various methods to achieve it by Nayanmoni Gogoi on the occasion of World Environment Day, June 5, 2021. https://www.firstpost.com/author/nayanmoni_gogoi

| Conference/Workshop/Symposium | /Seminar etc. Attended |
|-------------------------------|------------------------|
|-------------------------------|------------------------|

| Name of Faculty/Staff Member | Purpose of Attending | Title of Event | Date/ Period | Organizer and Venue |
|------------------------------------|-------------------------|---|---------------------|---|
| Ashalata Devi | Session Chairing | International conference on biodiversity: exploration, exploitation and conservation for sustainable development | 05-01-2022 | Department of Botany Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Behali Assam |
| Pratibha Deka | Participation | Faculty development program on "Academic Writing" | May 10-16, 2021 | Ramanujan College, New Delhi; Online |
| Pratibha Deka | Participation | e-Workshop on Water Quantity and Water Quality | July 28-30, 2021 | TLC, Ramanujan College, New Delhi; Online |

Invited Talk

| Name of | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|----------|-----------------------|------------------------|------------|---------------------------------|
| Faculty | | | | |
| Member | | | | |
| Raza R. | Atmospheric | Contemporary and | 27/11/2021 | USTM, Meghalaya |
| Hoque | Chemistry | Emerging Issues in | | (Presented online) |
| | | Geography and | | |
| | | Environmental | | |
| | | Science | | |
| Ashalata | Biodiversity | Bio-energy and Bio- | 23-03-2021 | Department of Biotechnology, |
| Devi | Conversation for | Diversity Conservation | | KarpagaVinayaga College of |
| | Sustainable future | for Sustainable Future | | Engineering and Technology, |
| | | | | Affiliated to |
| | | | | Anna University, Chennai |
| | Forest Ecosystem | ID Refresher Course | 08-12-2021 | UGC-HRDC, Gauhati |
| | Dynamics in the | on Environmental | | University |
| | Context of Climate | Protection and | | |
| | Change: Northeast | Disaster Management | | |
| | India | | | |
| Sumi | Role of women in | International Women's | 08/03/2022 | Offline event |
| Handique | Environment for | Day 2022 | | Darrang college Women's |
| | sustainable future on | | | forum,Darrang College, Tezpur |
| | Women's Day | | | |
| Pratibha | Health Impacts of | One day National | 04/06/2021 | Ayya Nadar Janaki Ammal |
| Deka | Indoor Air Polliution | Webinar on Health | | College, Sivaski- 626124, Tamil |
| | from Biomass | Impacts of Indoor air | | Nadu, India |
| | Burning Emissions | pollution from | | |
| | | Biomass Burning | | |
| | | Emissions | | |

Other Significant Activities of the Department/Centre

• The Department of Environmental Science is providing vermicompost to the university community for the last 10 years. This was a small effort from the department to disseminate the "organic culture" and the distribution has been on request, and for free. Every year, about 10-12 members of the University community enjoy this service; approximately, we provide 10-20 kg of ready vermicompost to each of them. In 2019, the department has imparted hands-on training to more than hundred farmers on organic waste recycling through vermitechnology in collaboration with the

Biotech Hub of Tezpur University. We have also motivated a local farmer (Mr. Saiful Islam) to start his entrepreneurial venture as vermicompost trader in near future.

• Organized One-day National Seminar on 'Ecosystem Restoration' on the occasion of World Environment Day 2021 on June 5, 2021

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|--------------------|
| NET | 06 | |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic | Name of other Institute | Enrolled Academic Programme |
|-----------------|-----------|-------------------------|--------------------------------|
| | Programme | | |
| Naveen Sehrawat | M.Sc. | University of | MSc in Geographical |
| | | Manchestar | Information Science |
| Bikash Dhadumia | M.Sc. | IIT, (ISM)Dhanbad | Ph.D. in Environmental Science |
| Farah Jairam | M.Sc. | M & A Safety Services | Qualified Rigger |

DEPARTMENT OF MATHEMATICAL SCIENCES

About the Department

Established in 1994, the Department of Mathematical Sciences is one of the first three departments of the University. So far, 26 batches of students have completed their M.Sc. in Mathematics, 8 batches of students have completed their Integrated M. Sc. in Mathematics, and the 2 batches of students have completed their Integrated B. Sc. B.Ed. (Major in Mathematics), from the department. Besides these, 63 scholars have received their Ph.D. in Mathematics from the department. In addition, the department's faculty published over 30 research papers in national and international journals last year.

Academic Programmes and Student intake

| Programme | Student Intake |
|--------------------------------|----------------|
| Int B.Sc. B.Ed. in Mathematics | 13 |
| Int M.Sc. in Mathematics | 25 |
| M.Sc. in Mathematics | 53 |
| Doctor of Philosophy | 15 |

Thrust Research Areas of the Department/Centre

- Algebra
- Number Theory
- Numerical PDE
- Operator Theory

Major Facilities and Equipment Available

- ICT enable Classrooms
- Smart Classroom
- Computer lab equipped with 02 server, 28 PC
- Conference Room
- Seminar Hall
- Separate Cabins for Research Scholars

Faculty Members

| Designation | Name | Highest | Specialization | <email></email> | Date of |
|-------------|-------------|---------------|----------------------------|-----------------|-------------|
| | | Qualification | | @tezu.ernet.in | holding the |
| | | (Institute) | | | current |
| | | | | | position |
| | Nayandeep | PhD (Tezpur | Number Theory and | nayan | 24-09-2009 |
| | Deka Baruah | University) | Ramanujan's Mathematics | | |
| | Debajit | Ph.D. (Jamia | General Topology, Fuzzy | debajit | 13-08-2010 |
| | Hazarika | Milia Islamia | sets & applications | | |
| | | University) | | | |
| Professor | Munmun | Ph.D(Tezpur | Operator Theory, | munmun | 17-12-201 |
| | Hazarika | University) | Functional Analysis | | |
| | | | | | |
| | Milan Nath | Ph.D.(IIT, | Ordinary Graph Spectra, | milan | 15-10-2013 |
| | | Guwahati) | Inverse eigenvalue problem | | |
| | Santanu | Ph.D. (Tezpur | Nonparametric functional | sdutta | 24-06-2016 |

| | Dutta | University) | estimation and risk estimation | | |
|-----------|-----------------------|------------------------------|--|-----------|------------|
| | Dhiren Kumar | Ph.D. (Dibrugarh | Ring Theory; Finite Field Theory | dbasnet | 22-03-2017 |
| | Basnet | University) | 5 | | |
| Associate | Bhim Prasad Sarmah | Ph.D.(Gauhati University) | Theoretical Physics | bhim | 18-12-2009 |
| Professor | Shuvam Sen | Ph.D.(IIT, Guwahati) | Computational Fluid Dynamics | shuvam | 17-12-2012 |
| | Pankaj Kumar Das | Ph.D. (Delhi University) | Coding Theory | pankaj4 | 28-09-2015 |
| | Rajat Kanti Nath | Ph. D. (NEHU) | Algebra and Graph Theory | rknath | 05.12.2020 |
| Assistant | Jayanta Borah | Ph.D.(IIT, Guwahati) | Abstract Fractional Differential Equations, Mathematical Control theory | jba | 11-12-2019 |
| Professor | Debajit Kalita | Ph.D.(IIT, Guwahati) | Algebraic Graph Theory | kdebajit | 20-12-2020 |
| | Bipul Kumar Sarmah | Ph.D. (Tezpur University) | Theory of Partitions;Ramanujan Mathematics | bipul | 08-08-2011 |
| | Deepjyoti Goswami | Ph.D.(IIT, Bombay) | Finite Element Method | deepjyoti | 31-12-2012 |
| | Biswajit Das | Ph.D.(IIT, Guwahati) | Numerical Linear Algebra | bdas | 30-12-2021 |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the |
|---------------------|---------------------------|-------------------------------|---------------------|
| | | | current position |
| System Analysis | Anjan Kumar Bhattacharyya | anjan | 11-10-2012 |
| Technical Assistant | Krishna Das | krishnadas | 29-09-2010 |
| Multi Tasking Staff | Nur Ali | nurali | 01-04-1994 |

Major Research and Development Findings

| Faculty/ | Salient Research Findings |
|---------------------|--|
| Researcher | |
| Nayandeep | Proved that many q-products have matching coefficients with their reciprocals, found |
| Deka Baruah | new infinite classes of congruences satisfied by several restricted partition functions as well as fractional partition functions. |
| Dhiren Kumar | We establish some sufficient conditions for existence of a primitive normal element α |
| Basnet | such that $f(\alpha)$ is a primitive element, where $f(x)$ is quadratic (with non repeated roots), cubic polynomial, rational function etc. |
| Pankaj Kumar Das | Necessary and sufficient conditions for linear codes correcting periodic random and burst errors with their Hamming weight constraint are derived. Decoding error probability of such codes is studied. Construction of Integer codes correcting unidirectional, asymmetric burst, CT-burst, solid burst along with their storage consumption are studied. |
| Rajat Kanti Nath | The concepts of r-noncommuting graph of finite rings and g-noncommuting graph of a finite group relative to its subgroups have been introduced and obtained results regarding graph realizations. We compute energy, Laplacian energy and signless Laplacian energy of commuting graphs of certain super integral groups and showed |

| | that the commuting graphs of those groups are neither hyperenergetic nor | | | | |
|---------------|--|--|--|--|--|
| | borderenergetic. Common neighborhood spectrum and Common neighborhood energy of commuting graphs of several classes of finite non-abelian groups have been computed and showed that the commuting graphs of those groups are CN-integral but not CN-hyperenergetic. We compute energy, Laplacian energy and signless Laplacian energy of commuting conjugacy class graphs of certain classes of two generated finite groups and showed that the commuting conjugacy class graphs of those groups are super integral. We characterize those groups such that their commuting conjugacy class graphs are hyperenergetic, L-hyperenergetic or Q- hyperenergetic. By computing genus of commuting conjugacy class graphs of those groups we also characterize those groups such that their commuting conjugacy class graphs are planar, toroidal, double-toroidal or triple-toroidal. | | | | |
| Santanu Dutta | Asymptotic bias, variance and limiting distributions of empirical and kernel estimators | | | | |
| Santanu Dutta | of the distribution function based on positive length biased data are obtained. For the | | | | |
| | kernel estimator, the asymptotically optimal bandwidth is calculated and rule of thumb | | | | |
| | bandwidths are proposed. We prove the strong uniform, and L_2 consistency of the distribution function estimators based on length biased data Monte-Carlo Simulations are used to approximate and compare the exact mean squared errors of the distribution function estimators based on length biased data for different test distributions and sample sizes. A mathematical model for asset loss, where the asset is held over a long time period is proposed. This model is a generalization of the well known random walk model. We prove normal approximation and i.i.d. bootstrap approximation of the long-term loss distribution and its quantiles. Applications of our results in finance in the context of estimating risk measures such as the Value-at-Risk, Median Shortfall and the Short-Fall distribution of an asset or portfolio over a long time period are discussed. | | | | |

Research Projects (both Ongoing and New)

| Project Title | Funding Agency | Amount | Duration | Investigator(s) |
|--------------------------------------|-------------------|------------|---------------|-----------------|
| | | (in INR) | | |
| A study on exact generating | SERB-DST | 2,20,000/- | Three years | N. Deka Baruah |
| functions and congruences for | Under MATRICS | | (March 19, | |
| partition functions associated to | Scheme | | 2019 to March | |
| Rarnanujan's mock theta functions | | | 18, 2022) | |
| and other related functions | | | | |
| On Algebraic Connectivity and | SERB | 6,60,000/- | 3 years | Debajit Kalita |
| Laplacian Spectral Radius of | | | | |
| Graphs | | | | |
| On Pareto eigenvalue of distance | SERB | 6,60,000/- | 3 years | Milan Nath |
| matrix of connected graphs | | | | |
| Point and interval estimation of | SERB, MATRICS | | 36 Months, | Santanu Dutta |
| some functionals of the | research Grant, | 6,60,000/- | Date of | |
| distribution function of identically | Govt of India. | | commencemen | |
| distributed random variables | Order number | | t 19/03/2020 | |
| and their sums with applications | SERB/F/11096/2019 | | | |
| | -2020 dated 16 | | | |
| | March, 2020 | | | |

Publications by Faculty and Staff Members Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Baruah, N. D. and Das, H. (2022). Infinite families of congruences modulo powers of 2 for some partition functions involving only odd parts, *International Journal of Number Theory*, DOI: 10.1142/S179 3042122500944.
- Baruah, N. D. and Das, H. (2022). On 3^k -regular cubic partitions, *Journal of the Korean Mathematical Society*, https://doi.org/10.4134/JKMS.j210517 pISSN: 0304-9914 / eISSN: 2234-3008.
- Baruah, N. D. and Das, H. (2022). Matching Coefficients in the series expansions of certain *q*-products and their reciprocals, *The Ramanujan Journal*, 2021, DOI: 10.1007/s11139-021-00534-4.
- Baruah, N. D. and Das, H. (2021). Relations among representations of integers by certain quadratic forms, *Indian Journal of Pure and Applied Mathematics*, DOI: https://doi.org/10.1007/s13226- 021-00158-w.
- Baruah, N. D. and Das, H. (2021). Generating functions and congruences for 9-regular and 27-regular partitions in 3 colors, *HardyRamanujan Journal* (Special Commemorative volume in honour of Srinivasa Ramanujan), 44: 101–115.
- Baruah, N. D. and Das, H. (2021). Families of congruences for fractional partition functions modulo powers of primes, *Research in Number Theory*, 7: 21 pp., Article No. 57.
- Baruah, N. D. and Bandyopadhyay, S. (2021). The *n*-color partition function and some counting theorems, Integers, 21: 16 pp., , #A83.
- Bhowal, P. and Nath, R. K. (2021). Spectral aspects of commuting conjugacy class graph of finite groups, *Algebraic Structures and Their Applications*, 8(2): 67–118.
- Bhowal, P. and Nath, R. K. (2022). Genus of commuting conjugacy class graph of certain finite groups, *Algebraic Structures and Their Applications*, 9(1): 93–108.
- Bhowal, P., Nongsiang, D. and Nath, R. K. (2022). Non-solvable graphs of finite groups, *Bulletin of the Malaysian Mathematical Sciences Society*, Accepted.
- Bose, A. and Dutta, S. (2022). Kernel based estimation of the distribution function for length biased data, *Metrika: International Journal for Theoretical and Applied Statistics*, Springer, 85(3), pages 269-287. DOI: 10.1007/s00184-021-00824-3
- Das, P.K. and Haokip, L. (2022). Low-density periodical burst correcting codes with decoding probability and detection capability. *Journal of Applied Mathematics and Computing*. https://doi.org/10.1007/s12190-022-01716-z.
- Das, P.K. and Haokip, L. (2022). Codes with burst distance and periodical burst errors. *Journal of Computational and Applied Mathematics*. 411:114240.
- Das, P.K. and Haokip, L. (2022). Periodical burst error correcting codes with decoding error probability. *Discrete Mathematics Letters*. 8: 49–56.
- Das, P.K. and Haokip, L. (2021). Correction and Weight Distribution of Periodic Random Errors. *Science and Technology Asia*. 26 (4): 39–48.
- Das, P.K. and Pokhrel, N. K. (2021). Asymmetric CT-Burst Correcting Integer Codes. 2021 5th International Conference on Information Systems and Computer Networks (ISCON). 1-5. IEEE. DOI: 10.1109/ ISCON52037.2021.9702506.
- Das, P.K. and Kumar, S. (2021). Location and weight distribution of key errors. *Matematicki Vesnik*. 73(1): 43–54.
- Deka, D. and Sen, S. A new transformation free generalized (5,5)HOC discretization of transient Navier-Stokes/Boussinesq equations on nonuniform grids, *International Journal of Heat and Mass Transfer*, vol. 171, p. 120821, 2021.

- Deka, D. and Sen, S. Compact higher order discretization of 3D generalized convection diffusion equation with variable coefficients in nonuniform grids, *Applied Mathematics and Computation*, vol. 413, p. 126652, 2022.
- Dutta, J., Basnet, D. K. and Nath, R. K. (2021). Characterizing some rings of finite order, *Tamkang Journal of Mathematics*, DOI: https://doi.org/10.5556/j.tkjm.53.2022.3370.
- Dutta, P. and Nath, R. K. (2021), Various energies of commuting graphs of some super integral groups, *Indian Journal of Pure and Applied Mathematics*, 52(1): 1–10.
- Fasfous, W. N. T., Sharafdini, R. and Nath, R. K (2021). Common neighborhood spectrum of commuting graphs of finite groups, *Algebra and Discrete Mathematics*, 32(1): 33–48.
- Giri, S. and Sen, S. A new (3,3) low dispersion upwind compact scheme, CSMCS 2020, *Communication in Computer and Information Science*, 1345, P. 134-145, 2021.
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- Nath, R. K., Fasfous, W. N. T., Das, K. C. and Shang, Y. (2021). Common neighborhood energy of commuting graphs of finite groups, *Symmetry*, 13(9): 1651 (12 pages).
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Publication of Articles in Other Forms

• Baruah, N. D. (2021). e-r Prarambhik kotha (An article in Assamese), Bijnan Jeuti, 56(3): 18-21.

| Name of Faculty/Staf f Member | Purpose of Attending | Title of Event | Date/ Period | Organizer and Venue |
|-------------------------------------|-------------------------|---|--------------------------------|--|
| Bipul Kumar Sarmah | Paper presentation | International e- conference on Number Theory and Differential Equations(ICND-2021) | 20-24 December, 2021 | Department of Mathematics, School of Physical Sciences, Central University of Karnataka (online) |
| D. K. Basnet | Session Chairing | Emerging trends in Pure and Applied Mathematics | 12-03-2022 to 13-03-2022 | Department of Applied Sciences, School of Engineering in association with Department of Mathematical Sciences, School of Sciences, Tezpur University. |
| Pankaj Kumar Das | Paper presentation | 4th International Conference On Mathematical Modelling, Applied Analysis And Computation-2021 (virtual) | 05-07-2021 To 07-07-2021 | JECRC University, Jaipur (Raj.), India |
| | Session Chairing | International Conference on Emerging Trends in Pure and Applied Mathematics (virtual) | 12-03-2022 To 13-03-2022 | Department of Applied Sciences, School of Engineering in association with Department of Mathematical Sciences, School of Sciences, Tezpur University. |
| Rajat Kanti Nath | Session Chairing | International Conference on Emerging trends in Pure and Applied Mathematics | 12-03-2022 to 13-03-2022 | Department of Applied Sciences (Mathematics) and Department of Mathematical Sciences, Tezpur University. (Blended Mode) |
| S. Sen | Session Chairing | Emerging trends in Pure and Applied Mathematics | 12-03-2022 to 13-03-2022 | Department of Applied Sciences, School of Engineering in association with Department of Mathematical Sciences, School of Sciences, Tezpur University. |

Conference/Workshop/Symposium/Seminar etc. Attended

Invited Talk

| Name of | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|---------|--------------------|-------------------------------|-------------|----------------------|
| Faculty | | | | |
| Member | | | | |
| Bipul | LMS Moodle: Site | Interdisciplinary Refresher | 10-06-2021 | Teaching Learning |
| Kumar | and Course Set Up | Course on Curriculum and | | Centre (TLC), Tezpur |
| Sarmah | | Pedagopgy | | University (online) |
| | Latex | State Level two days Workshop | 14-07-2021, | B. Baruah College, |
| | | on Latex | 15-07-2021 | Guwahati (online) |
| Debajit | Algebraic | International Conference on | 16-12-2021 | Centre for advanced |
| Kalita | connectivity of | Linear Algebra and it's | | Research in Applied |
| | graphs constructed | Applications | | Mathemetics and |
| | with given blocks | | | Statistics, MAHE, |
| | | | | Manipal |

| D. K. Basnet | Foundation (Level O) | | | MTTS Trust, Funded by NBHM, DAE. (Online) |
|-------------------|--|--|--------------------------------|---|
| | Learning Mathematics | Invited Talk (Webinar) | 2021 20-07-2021 | Tyagbir Hem Baruah College, Jamugurihat, Sonitpur, Assam (Online) |
| | On primitive and | International Webinar on | 08-11-2021 | Manipur University |
| | normal elements of finite fields | Foundations for Contemporary Mathematical Research | - 10-11- 2021 | (Online) |
| | Introduction to Finite Fields | Invited Talk (Webinar) | 8-12-2021 | University of Science and Technology, Meghalaya (Online) |
| | Understanding Mathematics | Students Enrichment Programme for M.Sc. students of Manipur University | 04-01-2022 | Manipur University and Tezpur University, held at Department of Mathematical Sciences, Tezpur University |
| | Real Analysis | OFCM(Online Foundation Course in Mathematics) follow up camp 2022 on Real Analysis | 09-01-2022 - 21-01- 2022 | MTTS Trust, Hyderabad under NBHM, DAE |
| | Real Analysis | Invited talk | 22-01-2022 | University of Science and Technology, Meghalaya |
| | Pi Day 2022 Lecture | Pi Day 2022 Invited Talk | 14-03-2022 | Don Bosco University, Assam |
| N. Deka Baruah | Matching coefficients in the series expansions of certain q- products and their reciprocals during December 20–24, 2021 | International e-conference on Number Theory and Differential Equations | 22-12-2021 | Central University of Karnataka, Bengaluru (Online) |
| | Matching coefficients in the series expansions of certain q- products and their reciprocals | Special Functions and Number Theory Seminar | 15-04-2021 | N. Deka Baruah |
| | Rational approximations to irrational numbers and some related topics | Seminar on the occasion of Pi Approximation Day | 22-07-2021 | Asom Jnanbhumi Academy, North Lakhimpur, Assam (Online) |
| | Teaching Mathematics with fun | Teacher Training Program | 11-08-2021 | Tezpur Science Centre of Assam Science Society, Assam (Online) |
| | Ramanujan and his mathematics | Seminar on the occasion of National Mathematics Day | 20-12-2021 | VIT Bhopal, Madhya Pradesh (Online) |
| | Ramanujan and his | Seminar on the occasion of | 22-12-2021 | Sabarmati University, |

| | Notebooks | National Mathematics Day | | Ahmedabad, Gujarat (Online) |
|------------------------|--|--|---------------------------------|---|
| | Ramanujan and his mathematics | National Mathematics Day | 22-12-2021 | St. Anthony's College, Shillong (Online) |
| | Ramanujan and a glimpse of his mathematics | Seminar on the occasion of National Mathematics Day | 22-12-2021 | Rajiv Gandhi University, Arunachal Pradesh (Online) |
| | Some Applications of the Division Algorithm and Arithmetical Functions | Refresher Course in Mathematics for College/University Teachers | 27-01-2022 and 28-01-2022 | Gauhati University, Assam (Online) |
| | Ramanujan and a glimpse of his mathematics | On the occasion of National Science Day | 28-02-2022 | Institute of Advanced Study in Science and Technology (IASST), Guwahati |
| | History of Pi | Three Days International Conference on Pi on the occasion of Pi Day | 12-03-2022 | Manipur University, Manipur (Online) |
| | Ramanujan, Pi and International Day of Mathematics | Seminar on the occasion of International Mathematics Day | 14-03-2022 | University of Science and Technology, Meghalaya (USTM) |
| | A Glimpse of Ramanujan's Mathematics | Seminar on the occasion of International Mathematics Day | 14-03-2022 | Cotton University, Guwahati |
| | Ramanujan's contribution to Pi | International E-Seminar Advances in Mathematical Sciences (ISAMS-2022, Celebration of International Mathematics Day) | 16-03-2022 | Departments of Mathematics, Central University of Karnataka, Kalaburagi and Sri Venkatesh University, Tirupati (Online) |
| | Ramanujan's Contribution to Mathematics | The Fifth Bhupati Chandra Deka Memorial Lecture | 28-03-2022 | Department of Mathematics, Gauhati University, Gauhati |
| Pankaj Kumar Das | Hat Problem and Hamming codes | Three Days National Conference on International Pi Day, Manipur University, 12-14 March, 2022 (virtual) | 12-03-2022 to 14-03- 2022 | Manipur University, India, |
| | Basic Coding Theory & its Applications | National Webinar on "Basic Coding Theory & its Applications" (virtual) | 14-08-2021 | Sadiya College, Assam |
| Rajat Kanti Nath | Commuting and non-commuting graphs of finite groups and their extensions | 27th Iranian Algebra Seminar | 10-03-2022 | Persian Gulf University, Iran (online) |

Other Significant Activities of the Department/Centre

International Conference on Emerging trends in Pure and Applied Mathematics; organized by • Department of Applied Sciences (Mathematics) in association with Department of Mathematical

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Sciences, Tezpur University during March 12 to 13, 2022 (Convenors: Dr. R. K. Nath, Prof. R. Haloi and Dr. B. K. Debnath).

• A One Day National Symposium on the occasion of National Science Day; organized by Department of Mathematical Sciences, Tezpur University in collaboration with Inscignis-2022 on March 01, 2022 (Convenors: Prof. D. K. Basnet, Dr. R. K. Nath and Dr. B. K. Debnath).

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|--------------------|
| NET-JRF | 02 | Integrated M.Sc. |
| NET-JRF | 11 | M.Sc. |
| GATE | 19 | M.Sc. |

Notable Placement of Students

| Name of Student | Academic Programme | Placement Designation | Company/ Organization | Mode of Selection |
|-----------------|-----------------------|--------------------------|--------------------------|-------------------|
| Priyanuj Saikia | Int. M.Sc. | Executive | Royal Bank of Canada | Off Campus |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic | Name of other Institute | Enrolled Academic |
|---------------------|------------|-----------------------------------|-------------------|
| | Programme | | Programme |
| Dipendranath Mahatu | M.Sc | Tulane University, Louisiana, USA | Ph.D. |
| Hridoyananda Saikia | Int. M.Sc. | University of Manitoba, Canada | Ph.D. |
| Manimugdha Saikia | Int.M.Sc. | Western University, Canada | Ph.D. |
| Priya Bucha Jain | M.Sc. | Western University, Canada | Ph.D. |
| Rahul Dutta | M.Sc. | Aix-Marseille University, Public | Leading to Ph.D. |
| | | university in Marseille, France | |
| Sourav Koner | M.Sc. | University of South Africa | Ph.D. |

DEPARTMENT OF MOLECULAR BIOLOGY AND BIOTECHNOLOGY

About the Department

The Department of Molecular Biology and Biotechnology (MBBT) is supported by UGC-SAP DRS II and DST-FIST. It was established on July 24, 1997. The Department got recognition from the Department of Biotechnology (DBT) of the Ministry of Science and Technology, Government of India for its Post Graduate programme in 1998. The department offers a two-year M. Sc degree in Molecular Biology and Biotechnology, a five-year Integrated M Sc in Bioscience and Bioinformatics/Life Sciences and PhD in Molecular Biology and Biotechnology. Faculty members of the department are trained in modern areas of Molecular Biology and Biotechnology from various internationally reputed Institutes and are actively involved in research.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|--------------------|------------------|
| <i>M. Sc.</i> | 30 |
| Int. M. Sc. | 25 |
| Ph.D. | 10-15 (variable) |

Thrust Research Areas of the Department/Centre

- Microbial, Plant, Animal and Environmental Biotechnology
- Disease Biology
- Bioinformatics and Computational Biology
- Omics in Biology

Major Facilities/Equipment available Genomics/Transcriptomics

DNA sequencers Bioanalyzer RT-PCR

Proteomics

Fast protein Liquid Chromatography (FPLC) UHPLC systems

Biochemistry/Metabolomics

Ultracentrifuge GC/MS HPLC FTIR Spectrofluorometer

Cell biology/Cell imaging

Flow cytometer Fluorescence microscope

Common Facilities

Animal cell culture facility Plant tissue culture facility Microbiology lab Computational facility

Centre

ONGC CPBT Centre for Petroleum Biotechnology (Industry-Academia)

| Designation | | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------------|------------------------------------|--|---|------------------------------------|--|
| Senior | Bolin Kumar | Ph D (Lond), | Genetic Engg, | bkkon | 13.11.2018 |
| Professor | Konwar, | DIC (Impcol) | Metagenomics | 1 | 12.04.2000 |
| | Ashis K. Mukherjee (on lien) | Ph.D., D.Sc. (Calcutta University) | Biochemical and proteomic analysis of venoms; Quality assessment and novel method of antivenom production; Drug disocovery from natural resources;Molecular diagnostics | <u>akm</u> | 13-04-2009 |
| | Shashi Baruah | Ph.D. (PGIMER, Chandigarh) | Immunology | sbaruah | 30-01-2004 |
| | Suvendra Kumar Ray | Ph.D. (CCMB, Hyderabad) | Molecular genetics, Plant pathogenic bacteria, Molecular evolution | <u>suven</u> | 03-04-2017 |
| | Anand Ramteke | Ph.D. (JNU, New Delhi) | Cancer Biology | anand | 21-03-2017 |
| | Manabendra Mandal | PhD (University of Delhi) | Microbial Biofilm, Bioenergy, Probiotics and Nutrition | <u>mandal</u> | 21/03/2017 |
| | Robin Doley | Ph. D (Tezpur University) | Snake venom biochemistry, Structure- function relation of venom protein | <u>doley</u> | 16-02-2016 |
| Associate Professor | Rupak Mukhopadhyay | Ph.D. (IACS, Kolkata) | Cellular and Molecular Biology | <u>mrupak</u> | 10-03-2022 |
| Assistant Professor | Eeshan Kalita (on lien) | Ph.D. (NIPGR, New Delhi and GU) | Nanobiotechnology, Plant-microbe- environment Interactions, Environmental Engineering and Bioenergy | <u>ekalita</u> | 24.8.2019 |
| | Surya Prakash G. Ponnam | Ph.D. (UoH), LVPEI, Hyderabad, | Human molecular genetics, Synthetic Biology | <u>Surya_p</u> | 29-07-2010 |

Faculty Members

| | | Telangana. | | | |
|---------|--|---|---|---------------|----------------------------|
| | Anupam Nath Jha | Ph.D. (IISc Bangalore) | Computational biophysics, Systems Biology, Structural bioinformatics | <u>anjha</u> | 07-09-2011 |
| | Nima D. Namsa | Ph.D. (IISc Bangalore) | Molecular Virology | <u>namsa</u> | 17-01-2012 |
| | Suman Dasgupta | Ph.D. (Visva- Bharati University) | Metabolic Disease Biology, Metabolic Inflammation, Insulin resistance and type 2 diabetes | <u>suman</u> | 01-05-2013 |
| | Venkata Satish Kumar Mattaparthi | M.Tech., Ph.D. (IIT Guwahati) | Computational Biotechnology and Bioinformatics | <u>venkat</u> | 03-06-2013 |
| | Jyoti Prasad Saikia | Ph.D. (TU) | Plant Biotechnology, Plant Secondary Metabolite | jyoti06 | 24/3/2017 |
| | Aditya Kumar | Ph.D. (IISc Bangalore) | Computational biology, Gene regulation, Structural bioinformatics | <u>aditya</u> | 12-04-2017 |
| | Pankaj Barah | Ph.D (NTNU, Norway) | Genomics, Computational Systems Biology | <u>barah</u> | 03-05-2017 |
| | Priyanka Sharma | PhD | Biotechnology | | Spring Semester 2021 |
| Guest | Shambhu Kumar | PhD | Biotechnology | | Spring 2021 |
| Faculty | Arup Jyoti Borah | PhD (IIT Guwahati) | Microbiology | | Spring 2022 |
| | Jahnu Saikia | PhD (IIT Guwahati) | Applied Microbiology | | Spring 2022 |

Officers and Staff Members

| Designation | Name | <email></email> | Date of holding the |
|----------------------------|--------------------------|-----------------|---------------------|
| | | @tezu.ernet.in | current position |
| Technical Officer | Dr. Kalyan Kr. Hazarika | <u>kalyan</u> | 16.09.1998 |
| Senior Technical Assistant | Dr. Naba Kr. Bordoloi | nabakb | 03.10.2010 |
| Laboratory Assistant | Mr. Pranab Mudoi | <u>pmudoi</u> | 06-03-2006 |
| Assistant | Mrs. Pranita S. Talukdar | <u>pranita</u> | 17.05.2010 |
| M.T.S | Mr. Guna Das | gunadas | 01-01-1995 |

Major Research and Development Findings

| Faculty/ | Salient Research Findings | | | |
|------------|---|--|--|--|
| Researcher | | | | |
| B K Konwar | Infectious bacteria in reproductive tract of women were isolated, characterized and identified, developed medicated Tempon, produced V-spray with D- and L-lactic acid bacteria. Protease gene (s) in intestinal DNA, gut digesta mg-DNA and proteolytic bacteria from Asiatic mud eel was exploited. | | | |

| D 1 | |
|------------------------|--|
| Rupak Mukhopadhyay | The laboratory studied the novel role of ribosomal protein L22 (RPL22) in cancer progression. It was found that downregulation of RPL22 increased proliferation and expression of Epithelial-Mesenchymal Transition (EMT) markers. The role of high salt treatment in tumor associated macrophages and its effect on breast cancer has been studied. Bioactive compounds from medicinal plants are investigated for their role as anti- inflammatory and anti-cancer agents Mechanism of polyphenol-based anti-inflammatory action has been studied using monocyte-macrophage system |
| Pankaj Barah | Development of two state of the art knowledgebase Knowledgebase for Rice Sheath Blight Information (KriShI : <u>http://www.tezu.ernet.in/krishi/</u>) and knowledgebase on plant combined stress (PlnCoS: <u>http://www.tezu.ernet.in/plncos/</u>). Generated and submitted large scale transcriptomic data on rice sheath blight diseases (NCBI SRA accession: <u>https://www.ncbi.nlm.nih.gov/bioproject/PRJNA725619/</u>). Developed and benchmarked an end to end comprehensive computational pipeline for predicting novel long non-coding RNA prediction https://github.com/evolomics-group. |
| Jyoti Prasad Saikia | Germination stimulation of <i>Vigna radiata</i> seed, anticancer activity of <i>Oroxylum</i> <i>indicum</i> compounds, antibacterial activity of <i>Allium sativum</i> and <i>Brassica nigra</i> seeds oil macerate, use of naturally occurring compound to dye silk, cotton and hair, and enhancing quality of tea. |
| Dr. S. K. Ray | Development of an easy protocol for determination of bacterial colony forming unit. Development of an online tool to find out dN/dS in homologous coding sequences between closely related bacteria. |
| Dr. R. Doley | Reported for the first time the venom composition and venom variation India green pit viper snakes (<i>Trimeresurus erythrurus, T. septentrionalis, Viridovipera medoensis, and Popiea popieorum</i>). Immunoreactivity analysis revealed that Indian polyvalent antivenom has poor efficacy in neutralization the biochemical and biologicals effects of Green pit viper. Through in-silico approach we have designed and validated nucleic acid aptamers against snake venom PLA2, a hydrolytic enzyme present in all venomous snakes. |

Research Projects

| Project Title | Funding Agency | Amount | Duration | Investigator(s) |
|-------------------------------------|-------------------|-------------|------------|-----------------|
| | | (in INR) | | |
| Integrative approach for | Department of | 1,01,10,000 | 01-02-2018 | Pankaj Barah |
| understanding the role of | Biotechnology | | to | |
| noncoding mutations in the | (DBT), Government | | 31-01-2023 | |
| evolution of biological systems | of India | | | |
| A case-control pilot study for | Indian Council of | 19,60,000 | 29-07-2021 | Pankaj Barah |
| identification and validation of | Medical Research | | То | - |
| Gallbladder cancer biomarkers | (ICMR), Govt. of | | 28-07-2023 | |
| fromNorth-East Indian population | India. | | | |
| using transcriptomics approach. | | | | |
| Big data and Machine learning | Science and | 23,24,000 | 07-11-2019 | Pankaj Barah |
| based approach to understand | Engineering | | to | - |
| combined stress response signatures | Research Board | | 19-02-2022 | |

| in multiple cultivating crop plants | (SERB), Government of India | | | |
|--|--|-----------|--------------------------------|--|
| Integrative systems biology approach to identify the molecular response signatures in Rice during concurrent biotic (Rhizoctonia solani) and abiotic (heat) stresses | Department of Biotechnology (DBT), Government of India | 82,96,988 | 01-07-2018 To 30-06-2021 | Pankaj Barah |
| Enhanced production of anticancer flavones- Baicalein, Chrysine and Oroxylin A, from Oroxylum indicum tissue culture and studies on its chemopreventive activities | Department of Biotechnology (DBT), Government of India | 260719 | 2019-22 | J. P. Saikia (PI) & A. Ramteke (Co-PI) |
| Bioconversion of organic waste and de-oil algal residue into biodiesel and Project 3: value added products (carotenoids using oleaginous microbes) | Department of Biotechnology (DBT), Government of India | 1199450 | 2019/4/29- 2021/4/29 | M. Mandal |
| Bioremediation and reclamation of petroleum oil hydrocarbon contaminated soil/ water by microaerophilic/anaerobic bacterial consortium | ONGC-CPBT | 1134000 | 2020/06/04- 2022/06/03 | M. Mandal |
| Indigenous probiotic Based formulation for Immunity, Carbohydrate, glucose and Lipid Metabolism | Department of Biotechnology (DBT), Government of India | 6757360 | 2019/09/09- 2022/09/09 | M. Mandal |
| Indigenous probiotic based approach for cardiovascular disease management | Indian Council of Medical Research (ICMR), Govt. of India. | 5678960 | 2021/12/21- 2024/12/21 | M. Mandal |
| Investigating the role of ribosomal protein L22 in human breast cancer progression | Science and Engineering Research Board (SERB), Government of India | 54,18,010 | 2022-2025 | Rupak Mukhopadhyay, T.U. (PI) Sanjeev Wagmare, ACTREC (Co- PI) |

Publications by Faculty and Staff Members Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Thakur, S., Malhotra, A., Giri, S., Lalremsanga, H.T., Bharti, O.K., Santra, V., Martin, G., and Robin Doley.(2022). Venom of several Indian green pit vipers: Comparison of biochemical activities and cross-reactivity with antivenoms *Toxicon*, 210: 66-77.
- Patowary, P., Bhattacharyya, D.K., and Barah, P. (2022). SNMRS: An advanced measure for Coexpression network analysis. *Computers in Biology and Medicine*, 105222.
- Pal, U., Sahu, A., Barah, P., and Limaye, A. M. (2022). Transcriptomic data of MCF-7 breast cancer cells treated with G1, a G-protein coupled estrogen receptor (GPER) agonist. *Data in brief*, 41:107948-107948.
- Barua, D., Mishra, A., Kirti, P. B., and Barah, P. (2022). Identifying Signal-Crosstalk Mechanism in Maize Plants during Combined Salinity and Boron Stress Using Integrative *Systems Biology Approaches*. BioMed Research International

- Eldiehy, K. S., Gohain, M., Daimary, N., Borah, D., Mandal, M., and Deka, D. (2022). Radish (Raphanus sativus L.) leaves: A novel source for a highly efficient heterogeneous base catalyst for biodiesel production using waste soybean cooking oil and Scenedesmus obliquus oil. *Renewable Energy*, 191: 888-901.
- Eldiehy, K. S., Bardhan, P., Borah, D., Gohain, M., Rather, M. A., Deka, D., and Mandal, M. (2022). A comprehensive review on microalgal biomass production and processing for biodiesel production. *Fuel*, 324:124773.
- Bardhan, P., Eldiehy, K. S., Daimary, N., Gohain, M., Goud, V. V., Deka, D., and Mandal, M. (2022). Structural Characterization of Mixed Rice Straw and Deoiled Algal Cake-Based Substrate as a Potential Bioenergy Feedstock for Microbial Lipids and Carotenoid Production. *Waste .and Biomass Valorization*, 13(1): 195-212.
- Rather, M. A., Deori, P. J., Gupta, K., Daimary, N., Deka, D., Qureshi, A., and Mandal, M. (2022). Ecofriendly phytofabrication of silver nanoparticles using aqueous extract of Cuphea carthagenensis and their antioxidant potential and antibacterial activity against clinically important human pathogens. *Chemosphere*, 300: 134497.
- Sen, P., Aziz, R., Deka, R. C., Feil, E. F., Ray, S. K. and Satapathy, S. S. (2022). Stem region of tRNA genes favors transition substitution towards keto bases in bacteria. *Journal of Molecular Evolution*, 90 (1): 114-123.
- Devi, A. and Doley, R. (2021). Neutralization of Daboxin P activities by rationally designed aptamers, 203: 93-103.
- Roy, N., Kshattry, M., Mandal, S., Jolly, M. K., Bhattacharyya, D. K., and Barah, P. (2021). An integrative systems biology approach identifies molecular signatures associated with gallbladder cancer pathogenesis. *Journal of clinical medicine*, 10:3520.
- Konwar, B. K. (2020/3). Construction of a metagenomic DNA library for a novel lipase from the bakery soil of Assam, India. Kalpana Sagar, *International Journal of Research and Analytical Reviews*, 7 (1): 148-151.
- Bharali., and Konwar, B. K. (2021). Bioprospecting of indigenous surfactant-producing oleophilic bacteria for green remediation: An eco-sustainable approach for the management of petroleum contaminated soil", accepted in *3 Biotech*.
- Konwar, B. K., Deka, R. C., and Singh, C. B. (2021). Design of Potential IKK-β Inhibitors using Molecular Docking and Molecular Dynamics Techniques for their Anti-cancer Potential. Singh, Salam P.; Hussain, Iftikar; Current Computer - Aided Drug Design, 17(1): 83-94. Bentham Sci Pub. DOI//doi.org/10.2174/1573409916666200102121505.
- Rather, M. A., Gupta, K., and Mandal, M. (2021). Inhibition of biofilm and quorum sensingregulated virulence factors in Pseudomonas aeruginosa by Cuphea carthagenensis (Jacq.) JF Macbr. L333eaf extract: an in vitro study. *Journal of Ethnopharmacology*, 269: 113699.
- Rather, M. A., Gupta, K., Bardhan, P., Borah, M., Sarkar, A., Eldiehy, K. S., and Mandal, M. (2021). Microbial biofilm: A matter of grave concern for human health and food industry. *Journal of Basic Microbiology*, 61(5):380-395.
- Bardhan, P., Baruah, J., Raj, G. B., Kalita, E., and Mandal, M. (2021). Optimization of culture conditions for biomass and lipid production by oleaginous fungus Penicillium citrinum PKB20 using response surface methodology (RSM). *Biocatalysis and Agricultural Biotechnology*, 37: 102169.
- Rather, M. A., Gupta, K., and Mandal, M. (2021). Microbial biofilm: formation, architecture, antibiotic resistance, and control strategies. *Brazilian Journal of Microbiology*, 52(4): 1701-1718.
- Islam, T., Madhubala, D., Mukhopadhyay, R., and Mukherjee, A.K. (2021).Transcriptomic and functional proteomics analyses to unveil the common and unique pathway(s) of neuritogenesis

induced by Russell's viper venom nerve growth factor in rat pheochromocytoma neuronal cells-, *Expert Review of Proteomics*, 18:463-481. https://doi.org/10.1080/14789450.2021.1941892

Khatun, B., Majumder, M., Mukhopadhyay, R., Yasmin, R., Doley, R. and Maji, T.K. (2021). Effect of Curcumin-Hydroxypropyl-ββ-Cyclodextrin complex and the complex loaded gelatin carrageenan microparticles on the various chemical and biological properties. *J. Pharm. Innovation* (Accepted). https://doi.org/10.1007/s12247-021-09559-0.

Publication of Books

- Konwar. B. K. (2022). Bacterial Biosurfactant. Apple Academic Press, Inc., New Jersy, USA and Ontario, Canada, ISBN 978-1-7746-3056-3.
- Konwar. B. K. (2022). Apple Academic Press, Inc., New Jersy, USA and Ontario, Canada (Online), ISBN 978-1-77491-250-8.
- Konwar. B. K (2022). The struggle with a Hill University, OmniScriptum S.R.L., Str. Armeneasca 28/1, Office 1, Chisinau-2012, Republic of Moldova, ISBN 978-613-7-41454-5.
- Barah, P. Bhattacharyya, D. K. and Kalita, J. K. (2021). Gene Expression Data Analysis: A Statistical and Machine Learning Perspective. Chapman and Hall/CRC, USA.

Publication of Book Chapters

- Kumar, K. and Konwar. B. K. (2022). Gut Metagenomics of Pati Hanh (*Anas platyrhynchos domesticus*), *Molecular Genetics and Genomics Tools in Biodiversity Conser- vation* pp 267-280, DOI: 10.1007/978-981-16-6005-4_13.
- Bardhan, P., Deka, A., Bhattacharya, S. S., Mandal, M., & Kataki, R. (2022). Economical aspect in biomass to biofuel production. In *Value-Chain of Biofuels* (pp. 395-427). Elsevier.
- Gupta, K., Bardhan, P., Saikia, D., Rather, M. A., Loying, S., Mandal, M., & Kataki, R. (2022). Microbial Fermentation: Basic Fundamentals and Its Dynamic Prospect in Various Industrial Applications. *Industrial Microbiology and Biotechnology*, 107-128.
- Gupta, K., Bardhan, P., Rather, M. A., Saikia, D., Loying, S., Mandal, M., & Kataki, R. (2022). Microbes in Resource and Nutrient Recovery via Wastewater Treatment. In *Industrial Microbiology and Biotechnology* (pp. 643-665). Springer, Singapore.

Publication of Articles in Conference Proceedings

- Konwar. B. K. (2022). Alk B gene from mgDNA and assessment with bioinformatics, National Seminar on Advances in Basic and Translational Research in Biology (ABTRiB), Silver Jubilee, Dept of Mol Biol & Biotech, Tezpur University (Central), March 11-12, 2022
- Dutta A, Mattaparthi, V.S.K, Mukhopadhyay, R. (2022). A rational approach for identification of potential polyphenols against IL-6-mediated inflammation. In *National seminar on Advances in Basic and Translational Research in Biology (ABTRiB)*, Tezpur University.

| Name of | Purpose of Attending | Title of Event | Date/Period | Organizer and Venue |
|----------------|------------------------|--------------------|-------------|-----------------------|
| Faculty/ Staff | | | | |
| Member | | | | |
| Pankaj Barah | Conducted workshop. | Big data analysis | 21-03-2022 | The workshop was |
| | 'KARYASHALA' is an | and integration in | То | organized online |
| | endeavor of | biology | 25-03-2022 | collaboratively with |
| | Government of India by | | | Indian National Young |
| | Science and | | | Academy of Sciences |

Conference/Workshop/Symposium/Seminar etc. Attended

| | Engineering Board (SERB) under Accelerate Vigyan Scheme. | | | (INYAS), Tezpur University; Indian Institute of Sciences, CSIR-National Chemical Laboratory, Pune; Shiv Nadar University; National Rice Research Institute – Cuttack. |
|-----------------------|---|---|-----------------------------|--|
| J. P. Saikia | Participation | Week long FDP organized by TLC and MBBT, TU | 06/9/2021 to 10/9/2021 | TLC & Dept. of MBBT, TU (Online) |
| Rupak Mukhopadhyay | Organizing committee | National seminar on Advances in Basic and Translational Research in Biology (ABTRiB) | 11-03-2022 to 12-03-2022 | Department of MBBT, Tezpur University |
| J. P. Saikia | Participation | Biology is fascinating | 01/3/2022 | Dept. of MBBT, TU (Offline) |
| | Participation | National Webinar on Advances in Basic and Translational Research in Biology (ABTRiB) | 11-12 March 2022 | Dept. of MBBT, TU (Offline) |

Invited Talk

| Name of | Title of the Talk | Title of the Event | Date | Organizar and Vanua |
|---------------|-----------------------|------------------------|-------------|-------------------------|
| | The of the Talk | The of the Event | Date | Organizer and Venue |
| Faculty | | | | |
| Member | | | | |
| Dr Pankaj | Incredible North-East | DKFZ Global Alumni | 20-11-2021 | German Cancer |
| Barah | India and Awesome | Reception Event | | Research Center, |
| | Assam | | | Heidelberg, Germany |
| | Presented an invited | Recent Trends of | 10-03-2022 | The Advanced Centre |
| | talk | Computational Biology | То | for Treatment, Research |
| | | in Basic & | 11-03-2022 | and Education in Cancer |
| | | Translational Research | | (ACTREC), Mumbai |
| Dr. Rupak | Good Academic | Sensitization Talk on | 12-11-2021 | Department of MBBT, |
| Mukhopadhyay | Research Practice | Good Academic | | Tezpur University |
| | (GARP) for Master's | Research Practice | | |
| | and Integrated | (GARP) | | |
| | Master's degree | | | |
| | students | | | |
| | Recombinant DNA | Weeklong FDP on | 10-09-2021 | Teaching Learning |
| | Technology: | Emerging Areas of | | Center, Tezpur |
| | Revolutionizations of | Molecular Biology and | | University |
| | Modern Biology | Biotechnology | | |
| Dr. S. K. Ray | Molecular | Four days programme. | 17.02.22 to | CDFD Hyderabad |
| | Intricacies in Plant | | 20.02.2022 | |

| Associated | | |
|----------------|--|--|
| Microorganisms | | |
| (MIPAM-2022) | | |

Awards/Honours/Notable Achievements

| Name of | Designatio | Achievement | Event/Awarded by |
|----------|-----------------|--|----------------------------|
| Awardee | n of Awardee | | |
| Ria Lodh | M.Sc | First prize in PG Thesis Competition for Women | IEEE-GRSS Kolkata |
| | student | 2021, organized by IEEE-GRSS Kolkata Chapter. | Chapter. |
| Akash | PhD | Best oral presentation award during the National | Organised by the |
| Das | Research | Seminar on "Advances in Basic and Translational | Department of Molecular |
| | Scholar | Research in Biology (ABTRiB)". | Biology and Biotechnology, |
| | | | Tezpur University, 11-12 |
| | | | March, 2022 |

Other Significant Activities of the Department

Rupak Mukhopadhyay:

1. Organized National Seminar on "Advances in Basic and Translational Research in Biology" at Tezpur University, Mar 11-12, 2022 as Convener.

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|-------------------------------|
| NET | 05 | MSc in MBBT |
| GATE | | MSc in MBBT & Int. MSc in |
| | 05 | Bioscience and Bioinformatics |
| DBT-JRF | 01 | MSc in MBBT |

Notable Placement of Students

| Name of Student | Academic | Placement | Company/ Organization | Mode of |
|--------------------|-------------|-------------|------------------------------|-----------|
| | Programme | Designation | | Selection |
| Niharika Das | MSc in MBBT | | Chegg India Pvt. Ltd. | On-Campus |
| Ria Lodh | MSc in MBBT | | Dr. Reddy's Laboratories Ltd | On-Campus |
| Minu Thapa | MSc in MBBT | | Dr. Reddy's Laboratories Ltd | On-Campus |
| Sonali Singh | MSc in MBBT | | Dr. Reddy's Laboratories Ltd | On-Campus |
| Sudem Boro | MSc in MBBT | | Dr. Reddy's Laboratories Ltd | On-Campus |
| Ujjayita Chowdhury | MSc in MBBT | | Dr. Reddy's Laboratories Ltd | On-Campus |
| Angshuman Das | MSc in MBBT | | Dr. Reddy's Laboratories Ltd | On-Campus |
| Priya Joshi | MSc in MBBT | | Dr. Reddy's Laboratories Ltd | On-Campus |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic Programme | Name of other Institute | Enrolled Academic |
|--------------------|------------------------|------------------------------|--------------------------|
| | (in TU) | | Programme |
| Anahita D. | Int. MSc in Bioscience | Kanazawa University, Japan | PhD |
| Choudhury | and Bioinformatics | | |
| | Int. MSc in Bioscience | Kanazawa University, Japan | PhD |
| Sistrilekha Nath | and Bioinformatics | | |
| | Int. MSc in Bioscience | IIT Guwahati | |
| Nilave Ranjan Bora | and Bioinformatics | | PhD |
| Tangkam R Marak | MSc in MBBT | University of Nottingham, UK | PhD |

| Arnav Saha | MSc in MBBT | IISER Pune | PhD |
|--------------------|-------------|---------------------------|-----|
| Antara Chakraborty | MSc in MBBT | IISER Pune | PhD |
| Komal Rani | MSc in MBBT | JNU Delhi | PhD |
| Krishna Pradhan | MSc in MBBT | IISER Kolkata | PhD |
| Pawan Kumar | MSc in MBBT | CDRI Lucknow | PhD |
| | | Saha Institute of Nuclear | |
| Subhradip Nath | MSc in MBBT | Physics, Kolkata | PhD |
| Pallav Sengupta | MSc in MBBT | IIT Guwahati | PhD |
| Usashi Guha Roy | MSc in MBBT | IIT Gandhinagar | PhD |
| Akash Das | MSc in MBBT | Tezpur University | PhD |

DEPARTMENT OF PHYSICS

About the Department

Twenty-three years since its commencement in January 1998, the Department of Physics has stridden out not only in its post-graduation teaching but also in new frontiers of research. To keep pace with the advancement in science and technology, new special papers have been included with adaptation to new developments within the course content. The areas of specialization for post-graduation are Condensed Matter Physics, Electronics and Photonics, High Energy Physics, and Nano Science and Technology. To develop the students from the graduate level, the Department also started an Integrated M.Sc. in Physics in 2009. To add to this, keeping in mind the need of teachers at the school level, the Department has also been running a B.Sc., B.Ed. programme since July 2011.

Academic Programmes and Student Intake

| Academic Programme | Student Intake |
|---------------------------------|----------------|
| M.Sc. Physics | 38 |
| Integrated M.Sc. in Physics | 25 |
| Integrated B.ScB.Ed. in Physics | 22 |
| Ph. D. in Physics | Variable |

Thrust Research Areas of the Department

- Condensed Matter Physics
- Electronics and Communications
- Photonics
- High Energy
- Plasma Physics
- Astrophysics

Major Facilities/Equipment available

- FESEM
- TRPL
- X-RD
- UV-Vis
- SEM

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|-------------|-------------------------------|---|-----------------------------|------------------------------------|--|
| | Jayanta Kumar Sarma | Ph.D. (G.U) | High Energy Physics | jks | 24/09/2009 |
| Professor | Nidhi Saxena Bhattacharyaa | Ph.D. (D.U) | Microwave Communications | ndas | 05/12/2012 |
| | Nilakshi Das | Ph.D. (G.U) | Plasma Physics | nidhi | 05/12/2012 |
| | Gazi Amin Ahmad | Ph.D. (G.U) | Optoelectronics | gazi | 11/09/2013 |
| | Dambarudhar | Ph.D. (T.U) | Soft Condensed Matter | best | 03/09/2014 |

| | Mahanta | | | | |
|------------------------|----------------------------|---------------|---|----------|------------|
| | Pritam Deb | Ph.D. (J.U) | Mesoscopic Physics; Magnetism in low dimension; Molecular imaging; Surface Science; Electronic structure calculation | pdeb | 21/03/2017 |
| | Mrinal Kumar Das | Ph.D. (G.U) | High Energy Physics | mkdas | 05/12/2015 |
| | Pabitra Nath | Ph.D. (G.U) | Photonics | pnath | 05/12/2015 |
| | Pralay Karmakar | Ph.D. (G.U) | AstroPlasma | pralay | 5/12/2015 |
| Associate | N. G. K. | Ph.D. (G.U) | High Energy Physics | francis | 18/11/2019 |
| Professor | Francis | | | | |
| | Rajib Biswas | Ph.D. (D.U) | Optoelectronics | rajib | 29/08/2010 |
| | Rupjyoti Gogoi | Ph.D. (G.U) | AstroPhysics | rgogoi | 24/08/2011 |
| | Shyamal Kumar Das | Ph.D. (IISc.) | Material Science | skdas | 03/01/2013 |
| | Ritupan Sarma | Ph.D. (IISc.) | Nonlinear dynamics | ritupan | 31/03/2017 |
| Assistant Professor | Moon Moon Devi | Ph.D. (TIFR) | Neutrino and Astroparticle Physics | deimm | 17/05/2017 |
| | Jugal Lahkar | Ph.D. (GU) | QCD and Phenomenology | srinayan | 01/12/2021 |
| | Diana Thongjaomayu m | Ph.D. (NEHU) | Non equilibrium statistical mechanics | dianat | 03/01/2022 |
| Guest Faculty | Manisha Mandal | Ph.D. (G.U) | Condensed Matter | monisha | 03/03/2022 |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the current position |
|------------------------|----------------|-------------------------------|---|
| Technical Officer | Kishor Boruah | kiba | 23/07/1998 |
| Technical Assistant | Palash Dutta | duttapk | 12/10/2015 |
| Lab Assistant | Mrinmoy Gohain | mgohain | 01/08/2011 |
| | Dhruba Deka | ddeka | 01/07/2013 |
| | Biju Boro | bbiju | 31/07/2012 |
| Upper Divisional Clark | Umesh Patir | patir | 27/03/2007 |
| MTS | Narayan Sarma | narayan | 01/01/1995 |

Major Research and Development Findings

| Faculty/ | Salient Research Findings |
|------------|---|
| Researcher | |
| J.K. Sarma | Solutions of various equations describing parton distributions inside hadrons like DGLAP, GLR, Modified DGLAP, BFKL, Modified BFKL, GLR-MQ-ZRS etc. and their phenomenological studies. |
| N. Das | Proton bunch having energy of the order of 100 MeV with strong collimation has been observed in laser plasma interaction using PIC simulation of spherical plasma target in near critical density regime and having Gaussian density profile. Formation of strong shock wave due to wave breaking is found to be responsible for emergence of such energetic proton beam. |
| P. Deb | Obtained band alignment at heterointerface with rapid charge transfer supporting |

| | excellent photocatalytic degradation. Demonstrated the spin-wave dependent electronic structure and susceptibility behavior of model rapheme–phosphorene Van der Waals heterostructure in the framework of renormalization group approach. |
|-----------|--|
| M.M. Devi | The impact of scalar non-standard interactions on the physics potential of long-baseline neutrino experiments. The effects of environmental decoherence on neutrinos. |

Research Projects (both Ongoing and New)

| Project Title | Funding | Amount | Duration | Investigator(s) |
|--|-------------------------|-------------|-------------------------------|--|
| | Agency | (in INR) | | |
| Neutrino Mass, Lepton Number Violation, Baryogenesis, Dark Matter and related cosmology within Beyond Standard Model framework | DST-SERB, Delhi | 21.97 lakhs | May 2018 to March, 2022 | Mrinal Kumar Das |
| Iridescent colour and transparent (super)hydrophobicity in natural systems within a class. | DST-SERB | 58.67 lac. | 3 years (2022-25) | Dambarudhar Mohanta |
| Ion irradiation effects on conducting polymer@carbon nanomaterials-based nanocomposites functionalized with metal (Au/Ag) nanoparticles for amperometric immunosensors for efficient detection of mycotoxins. | IUAC, New Delhi | 10.11 lac. | 3 years (2019-22) | Dambarudhar Mohanta |
| Effect of energetic γ-photons and ion beams on the structural, opto-electronic and rheological property of Tungsten Dichalcogenides-based composites. | UGC-DAE CSR, Kolkata | 6.79 lac. | 3 years (2019-22) | Dambarudhar Mohanta |
| Neutrino Astrophysics with next generation Water Cherenkov Detectors | DST-SERB, India | 3090494 | 3 years | PI: Sovar Chakraborty (Deptt. of Physics, IIT Guwahati) Co-PI: Moor Moon Devi |
| R&D for probing neutrino properties with hyper-kamiokande detector | DST-JSPS | ТВА | 2 years | Indian PI: Dr. Moon Moon Devi Japanese PI: Prof. Takashi Kobayashi High Energy Accelerator Research Organization KEK, J-PARC Center |
| Spin Dynamics investigation and structural co-relation of the two-dimensional primary nanosystem | UGC-DAE- CSR | - | 2022-2024 | Prof. Pritam Deb |
| Realizing proximity effect in superconductor/semiconductor-ferromagnet van der Waals heterostructure | DST-SERB | 32.5 lacs | 2021-2023 | Prof. Pritam Deb |
| Efficient oil recovery as conventional | Department of | 15 lacs | 2019-2022 | Prof. Pritam |

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| energy using smart graphitic nanocomposite | Biotechnology, Govt. of India | | | Deb |
|--|----------------------------------|---------------------|---------------------------------|-----------------------------------|
| A study on laser-driven ion acceleration from plasma target and generation of large-scale magnetic field in relativistic laser-plasma interaction | DST-SERB | 25,56,400/- | 17-01-2020 to 16-01- 2023 | Prof. Nilakshi Das |
| Stability analysis of astrophysical complex plasma | DST-SERB | 16 Lakhs Approx. | 4 years | Prof. Pralay Kumar Karmakar |
| Development of multimodal optofluidic prototype for sensing heavy metal ions | BIRAC | 49.25 Lakhs | 2021-2023 | Dr. Rajib Biswas |
| Unravelling the trivalent ion electrochemistry of niobium and bismuth based chalcogenides and understanding the electrochemical mechanism by X-ray photoelectron spectroscopy for aluminum based energy storage devices | UGC DAE | 213000 | 2022-2023 | Dr. S.K. Das |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Das, P., Das, M.K., and Khan, N (2022). Five-zero texture in neutrino-dark matter model within the framework of minimal extended seesaw. *Nuclear Physics B*, 980: 115810
- Boruah, B.B., Das, M.K. (2022). Neutrinoless double-beta decay and lepton flavor violation in discrete flavor symmetric left-right symmetric model, *International Journal of Modern Physics*, 37(6): 2250026
- Das, P., Das, M.K., Khan, N. (2022). The FIMP-WIMP dark matter in the extended singlet scalar model. *Nuclear Physics B*. 975: 115677
- Das, P., Das, M.K., Khan, N. (2021). FIMP DM in the extended hyperchargeless Higgs triplet model. *Physical Review D*. 104(9): 095026
- Gautam, N., Das, M.K. (2021), Impact of texture zeros on dark matter and neutrino less double beta decay in inverse seesaw. *Nuclear Physics B*, 971: 115519
- Gautam, N., Krishnan, R., Das, M.K. (2021). Effect of Sterile Neutrino on Low-Energy Processes in Minimal Extended Seesaw With Δ (96) Symmetry and TM1 Mixing. *Frontiers in Physics*, 9: 703266
- Boruah, B.B., Sarma, L., Das, M.K. (2021). Lepton flavor violation and leptogenesis in discrete flavor symmetric scotogenic model. *Nuclear Physics B* 969:115472
- Lalung, M., Phukan, P. and Sarma, J. K. (2021). On analytical solutions of proton's structure functions in the framework of GLR–MQ-ZRS equation, *Results in Physics*, 28: 104551
- Abe, K., ..., Devi, M.M., Medhi, A., ... (2021). Supernova model discrimination with Hyper-Kamiokande. *The Astrophysical Journal* 916(1), 15
- M. Talukdar and P. Deb (2022), Recent progress in research on Multifunctional Graphitic Carbon Nitride: An emerging wonder material beyond catalyst. *Carbon 192*
- K. Baruah and P. Deb (2022), Enabling methanol oxidation by interacting hybrid nano system of spinel Co3O4 nanoparticles decorated Mxene. *Dalton Transactions 51*
- M. Talukdar, S. K. Behera, S. Jana, P. Samal and P.Deb (2022), Band alignment at heterointerface with rapid charge transfer supporting excellent photocatalytic degradation of Methylene Blue under sunlight. *Advanced Materials Interfaces 9*
- K. Baruah and P. Deb (2021), Electrochemically active site-rich nanocomposites of two-dimensional materials as anode catalysts for direct oxidation fuel cells: new age beyond rapheme. *Nanoscale Advances 3*

- S. K. Behera, M. Ahalawat, S. Jana, P. Samal and P.Deb (2021), Renormalization group analysis of weakly interacting van der Waals Fermi system. *Journal of Physics: Condensed Matter 33*
- B. Baruah and P. Deb (2021), Performance and application of carbon-based electrocatalysts in direct methanol fuel cell. *Materials Advances 2*
- Hota J., Shah Z., Khatoon R., Misra R., Pradhan A.C., Gogoi R. (2021). Understanding the X-ray spectral curvature of Mkn 421 using broad-band AstroSat observations, Monthly Notices of the Royal Astronomical Society, Volume 508(4): 5921–5934
- Khatoon R., Prince R., Shah Z., Sahayanathan S., Gogoi R. (2022). Temporal and spectral study of PKS 0208–512 during the 2019–2020 flare, *Monthly Notices of the Royal Astronomical Society*, 513(1), 611–623
- Haloi, A., and Karmakar, P.K. (2021). Astromodal wave dynamics in multifluidic structure-forming cloud complexes. *Pramana- Journal of Physics*, 95:1-12
- Kalita, D., and Karmakar, P.K. (2021). Adapted instabilities excited in spherical magnetized viscoelastic astroclouds with extreme dust-fugacity moderations. *European Physical Journal Plus*. 136:1-25
- Kalita, D., and Karmakar, P.K. (2021). Jeans instability in non-ideal MHD plasma clouds with geometric curvature effects. *IEEE Transactions on Plasma Science*, 49(7), 2042-2047
- Dasgupta, S., and Karmakar, P.K. (2021). Propagatory dynamics of nucleus-acoustic waves excited in gyrogravitating degenerate quantum plasmas electrostatically confined in curved geometry. *Scientific Reports*,11:1-12
- Nag, A., Devi, K., Paul, J., and Karmakar, P.K. (2021). Effect of levitated dust kinetics in the dynamic evolution of inhomogeneous plasma sheath. *Chinese Journal of Physics*, 73: 213–223
- Dutta, P., and Karmakar, P. K. Instability dynamics in gyrogravitating astroclouds with cosmic moderation in non-ideal MHD fabric. *Pramana- Journal of Physics*, 95: 1-12
- Sarma, P., and Karmakar, P.K. Nonlinear dynamics of structure formation in protoplanetary disks. *Chinese Journal of Physics*, 74: 9-19
- Dasgupta, S., and Karmakar, P.K.(2022). Relativistic ion-acoustic waves in electrospherically confined gyromagnetoactive quantum plasmas. *Chinese Journal of Physics*, 76: 299-309
- Bhagawati, A. and Das, N. (2021). Laser-accelerated protons using density gradients in hydrogen plasma spheres. *Journal of Plasma physics*. 87(4): 905870413
- Dutta, B., Bezbaruah, P., & Das, N. (2021). Magnetized wake driven anomalous diffusion in complex plasma. *Physics of Plasmas*, 28(8), 083703.
- Dutta, B., Sarma, H., Bezbaruah, P., & Das, N. (2022). Tunable rheological rapheme of magnetized complex plasma. *Physics Letters A*, *438*: 128110
- Bhagawati, A. and Das, N. (2022). Effect of density gradients on the generation of a highly energetic and strongly collimated proton beam from a laser-irradiated Gaussian shaped hydrogen microsphere. *Physics of Plasmas.* 29(5): 053107
- Bora, N., Biswas, R., and Srinivassan, V. (2021). CodaQback- A simplified Python Code facilitating auto-windowing for estimating Seismic Coda attenuation parameter. *International Journal of Geotechnical Earthquake Engineering*, 12(1): 1-11
- Paul, D., Biswas, R., and Saikia, G. (2021). Multiple Material Domain based Computational tools for Ease Assessment of Modal Parameter in Photonic Crystal Fibers. *International Journal of Communication Systems*,
- Paul, D., and Biswas, R. (2021). Influence of probe geometry of optical fibers in sensing volatile liquids through localized surface raphem resonance. *IEEE Transactions on Nanotechnology*, vol. 20, 69-74, 2021

- Boruah, B.S., and Biswas, R. (2021). In-situ sensing of hazardous heavy metal ions through an ecofriendly scheme. *Optics & Laser Technology* 137: 106813
- D. Paul, R. Biswas and S. Dutta, Optical fiber-based localized surface raphem resonance for volatile liquid sensing for different probe geometry, Micro and Nano Technologies, in Handbook of Nanomaterials for Sensing Applications, https://doi.org/10.1016/B978-0-12-820783-3.00020-8, 191-201
- Biswas, R. (2021). Can Wood Replace the Constituent Material of Optical Fiber? JOJ Wildl. Biodivers, 3(5):002 555625
- Biswas, R., Bharali, N, and Neog, A. A Novel Route towards Sustainable Synthesis of Graphene. *Letters in Applied NanoBioScience*, 10(4), 2760–2765
- Biswas, R. (2021). Covid-19 and race for rapid diagnosis. *J Bacteriol Mycol Open Access*. 9(2):54–55
- Neog, A., and Biswas, R. (2021). Exfoliated WS2 nanosheets as a potential candidate towards sensing heavy metals: a new dimension of 2D material. *Material Research Bulletin*. 144: 111471
- Biswas, R. (2021). BIG Data Analytics: A boon for SMART Healthcare. *International Journal on Engineering Technologies and Informatics*. 2(1):15–16
- Biswas, R. (2021). Engineered nanoparticles eluding bacteria to obliteration. Int J Biosen Bioelectron, 7(4):102–103
- Biswas, R., Saha, D., and Biswas, S. (2021). Novel ethanol sensing via clad modified fiber with SnO2:CuO with wireless adaptability. *Appl Nanoscience* 11, 2617–2623
- Biswas, R. (2021). A brief review of the recent Assam Earthquake. *Phys Astron Int J*, 5(3):90–91.
- Biswas, R. (2021). Catheter like in vivo fiber optic probe for rapid diagnosis of SARS-CoV-2, *Results in Optics*, 5:100180
- Neog, A., Das, P. & Biswas, R. A novel green approach towards synthesis of silver nanoparticles and it's comparative analysis with conventional methods. *Appl. Phys. A* 127: 913
- Biswas, R. (2021). Magnetic Heating and Anti-Cancer Nonmagnetic Nano Systems. *Biomed J Sci & Tech Res*, 38(1)
- Biswas, R. (2021). Variants of SARS-Cov-2: a cause of concern. J Bacteriol Mycol Open Access, 9(4):150-151.
- Barman, C., Neog, A., Biswas, S., Biswas, R. A Preliminary Investigation Towards Detecting Heavy Metal Ions with a Cost-Effective Scheme. *Letters in Applied NanoBioScience*, 11 (3), 3822 3825
- Paul, D., and Biswas, R. (2022). Clad modified varying geometries of fiber optic LSPR sensors toward detection of hazardous volatile liquids and their comparative analysis, *Environmental Technology & Innovation*, 25: 102112
- Biswas, R. (2022). Outlining Big Data Analytics in Health Sector with Special Reference to Covid-19. *Wireless Pers Commun*, 124(3), 2097–2108
- Bora, D.K., Singh, A.P., Borah, K., ..Biswas, R. (2022). Crustal Structure Beneath the Indo-Burma Ranges from the Teleseismic Receiver Function and Its Implications for Dehydration of the Subducting Indian Slab. *Pure Appl. Geophys.* 179, 197–216
- Bora, D.K., Mukherjee, P., Singh, A.P., Borah, K., and Biswas, R. (2022). Source parameters and scaling relations for small to moderate earthquakes in the Indo-Burma Ranges, North-east India, and its seismotectonic implications, *Geological Journal*. 57(2), 863–876
- Neog, A., Biswas, R., and Bharali, N. (2022). A novel electrochemical synthesis of rapheme oxide: Converting waste product to utility, *IOP: EuroPhysicsLetters* 137(1): 16001
- Nandi, S. Das, S. K. (2021) An electrochemical study on LiMn₂O₄ for Al³⁺ ion storage in aqueous electrolyte. *Phys. Chem. Chem. Phys.*, 23, 19150-19154

- Aideo, S.N., and Mohanta, D. (2021). Unusually diverse surface-wettability features found in the wings of butterflies across Lepidoptera order and evaluation of generic and vertical gibbosity-based models. *Physica Scripta*, 96:085004
- Sarmah, H.J., and Mohanta, D. (2021). Revisiting principles, practices and scope of technologically relevant 2D materials. *Journal of Materials Research*, 36:1961–1979
- Ansari, A., Mohanta, D., and Saha, A. (2021). Exploiting valence band mapping and select bluegreen and red phosphorescence decay of γ -irradiated nanoscale Eu³⁺: Gd₂O₃ below concentration quenching. *Optical Materials*, 122:111627. DOI:10.1016/j.optmat.2021.111627
- Singha, N., Das, M.K., Ansari, A., Mohanta, D., and Rajamania, P. (2021). Biogenic nanosized gold particles: Physico-chemical characterization and its anticancer response against breast cancer. *Biotechnology Reports*, 30:e00612. DOI:10.1016/j.btre.2021.e00612
- Ansari, A., Dey, S. and Mohanta, D. (2022). Significant red-luminescence from citrate-gel and hydrothermally derived nanoscale Eu³⁺: Gd₂O₃ with alkali metal ion (Na⁺, K⁺) co-doping. *Bulletin of Materials Science*, 5:21. DOI:10.1007/s12034-021-02592-2.
- Medhi, A., Baruah, S., Singh, J., Betty, C.A., and Mohanta, D. (2022). Au nanoparticle modified GO/PEDOT-PSS based immunosensor probes for sensitive and selective detection of serum immunoglobulin g (*IgG*). *Applied Surface Science*, 575:151775. DOI:10.1016/j.apsusc.2021.151775.
- Deka, B., Mohanta, D., and Saha, A. (2022). Featuring exfoliated 2D stacks into fractal-like patterns in WS₂/carboxy methyl cellulose nanocomposites. *Surfaces and Interfaces*, 29:101727. 10.1016/j.surfin.2022.101727

Publication of Book Chapters

- Korobi Konwar, Pritam Deb. (2021). A review on soft computing techniques in nanomagnetism and its impact on biomedical applications. In *Soft Computing Techniques in Engineering, Health, Mathematical and Social Sciences*, pages 33-46, ISBN: 1000409813, 9781000409819. CRC Press.
- Rohaan Deb and P. K. Karmakar. (2021). A new simplistic equation of a macroscopic equilibrium state for degenerate neutron stars. In *An introduction to molecular clouds*, pages 13-26, ISBN: 978-1-53619-178-3. Nova Science Publishers
- Rohaan Deb and P. K. Karmakar. A new P® relationship for stellar structures. In *An introduction to molecular clouds*, pages 27-40, ISBN: 978-1-53619-178-3. Nova Science Publishers
- Rajib Biswas. (2022), A Brief Appraisal of Machine Learning in Industrial Sensing Probes. In *Machine Learning in Industry*, pages 83-96. Springer. Cham
- Rajib Biswas and Sankar Biswas. (2022), Diatom assisted SERS. In Eds N. Mazumder and R. Gordon, *Diatom Spectroscopy*, Ch 9, ISBN: 978-1-119-71155-1, Wiley.
- Rajib Biswas. (2022), A Brief Appraisal of Blockchain-Assisted Secured Healthcare. In M Dutta Borah, R. Moro-Visconti, G.C. Deka, *Prospects of Blockchain in Digital Healthcare*, Ch 5, ISBN: 9781003133179, CRC Press.

Publication of Articles in Conference Proceedings

- Das, P., Das, M.K. (2022). KeV sterile neutrino mass model and related phenomenology. In *TiMP* 2021, volume- 265, pages 167-172, Assam Don Bosco University, Assam, India, Springer Link
- Gautam, N., Das, M.K. (2022). Impact of texture zeros of neutrino mass matrix on dark matter phenomenology. In *TiMP 2021*, volume- 265, pages 153-158, Assam Don Bosco University, Assam, India, Springer Link
- Sarma, L., Boruah, B.B., Das, M.K. (2022). Neutrinoless double beta decay in a flavor symmetric scotogenic model. In *TiMP 2021*, volume- 265, pages 217-222, Assam Don Bosco University, Assam, India, Springer Link

- Boruah, B.B., Das, M.K. (2022). Realization of left-right symmetric model by discrete flavor symmetries. In *TiMP 2021*, volume- 265, pages 285-291, Assam Don Bosco University, Assam, India, Springer Link
- Medhi, A., Dutta, D., & Devi, M. M. (2021, March-April). Exploring Scalar NSI Effects in Long Baseline Neutrino Experiments. In Beyond Standard Model: From Theory to Experiment (BSM-2021) March 29, 2021 to April 2, 2021, Cairo, Egypt.
- Medhi, A., Dutta, D., & Devi, M. M. (2021). Scalar Non Standard Interactions at long baseline experiments. In 37th International Cosmic Ray Conference, 12-23 July 2021 Berlin, Germany PoS ICRC2021 (2021), 1225.
- Medhi, A., Dutta, D., & Devi, M. M. (2022, March). Probing the effects of scalar Non Standard Interactions at Long Baseline Experiments. In The 22nd International Workshop on Neutrinos from Accelerators. 6-11 Sep 2021. Cagliari, PoS NuFact2021 (2022), 150.
- Sarker, A., Bhuyan, H., & Devi, M. M. (2022, March). Exploring environmentally induced decoherence effect on neutrino oscillation probabilities. In The 22nd International Workshop on Neutrinos from Accelerators. 6-11 Sep 2021. Cagliari, PoS NuFact2021 (2022), 210.
- Kashmiri Baruah, Pritam Deb, (2021). Nanocomposites of NiO/Graphene as Efficient Electrocatalyst in Fuel Cell. In *Proceedings of 28th National Conference on Condensed Matter Physics*, Springer Proceedings in Physics, SPPHY Volume 269, pages 211-216, Springer, Singapore.
- Khatoon, R., Shah, Z., Prince, R., Misra, R., Gogoi, R. (2021). Flux Distribution Study of Mkn 421 with SPOL, RXTE and Fermi-LAT Telescopes. In: Sengupta, S., Dey, S., Das, S., Saikia, D.J., Panda, S., Podila, R. (eds) Selected Progresses in Modern Physics. Springer Proceedings in Physics, vol 265. Springer, Singapore.
- Goswami P., Sinha A., Mankuzhiyil N., Misra R., Malik Z., Sahayanathan S., Chandra S., Gogoi R. (2021), X-ray emission study of extreme blazars using AstroSat, Proceedings of Science, 37th International Cosmic Ray Conference.
- A. Neog, R. Biswas. (2021), Optical Study of Liquid Dispersed Few-Layered WS2 Nanosheets, Springer Proceedings in Physics, pp. 243–249

| Inventor(s) | Patent Title | Application/ | Published/ | Country |
|---------------------------|-------------------------------------|---------------|------------|---------|
| | | Patent Number | Granted | |
| Rajib Biswas, Pritam Deb, | Development of multimodal | 202131041315 | Published | India |
| Nirmal Mazumder and | optofluidic system for sensing | | | |
| Soumyabrata Banik | heavy metal ions | | | |
| Pritam Deb, Monika | Device for sensing and collection | 202131054965 | Published | India |
| Sharma, Manas Chetry | of oil spill on water bodies. | | | |
| Pritam Deb, Monika | Smart Phone based remote | 202131055185 | Published | India |
| Sharma, Nitumoni Konwar | controlled device for collection of | | | |
| | oil from the oil spill on Land | | | |

Publication of Patents

Conference/Workshop/Symposium/Seminar etc. Attended

| Name of | Purpose of Attending | Title of Event | Date/ Period | Organizer and |
|---------------|-----------------------------|----------------------------|--------------|-------------------|
| Faculty/Staff | | | | Venue |
| Member | | | | |
| | Irradiation of material | CUPAC-NE Accelerator | 24-01-2021 | Cotton University |
| Dambarudhar | targets: Possibilities | Facility National Workshop | | (Online mode) |
| Mohanta | and challenges | | | |
| Monanta | Radiation induced | | 16-07-2021 | UGC-DAE CSR |
| | effects in layered | | | Kolkata (Online |

| | nanomaterials | | | mode) |
|--------------|--|--|--|--|
| | Nanodimensional 2D systems: Properties, | AICTE Training and Learning (ATAL) Academy | 04-10-2021 to 08-10-2021 | Department of Physics, |
| | challenges and future scope | Faculty, Development Programme (FDP) on Progress in Novel two dimensional Materials | | Tripura University (Online mode) |
| | Layered nanostructures and irradiation effect: optical, electrical and mechanical properties | 6 th International Conference on 'Nanostructuring by ion beams', (ICNIB 2021) | 05-10-2021 to 08-10-2021 | IoP Bhubaneswar and IUAC, New Delhi (Online mode) |
| | Biophotonic Coloration in Wings and Petals | 3 rd World Congress on Lasers Optics & Photonics (WCLOP 2021) | 16-11-2021 | (Online mode) |
| | 2D flakes of dichalcogenides and radiation impact | ICETNMST-2022 | 27-01-2022 to 29-01-2022 | NIT Nagaland (Online mode) |
| | Optical and biophysical perspectives of nanoscale rare earth oxides | EMDT-2022 | 27-01-2022 to 28-01-2022 | Satyabhama Univer sity (Online mode) |
| | Scope and challenges for studying optimistic 2D nanomaterials | Discussion meeting "Contemporary Aspects of Radiation Based Material & Chemical Sciences: The Macro, The Nano & The Lights" | 28-01-2022 | UGC-DAE CSR Kolkata (Online mode) |
| | Scope and journey of CMDAYS | PANE, (Organizing member and participant) Chairperson-Central Committee, CMDAYS 21 | 15-12-2021 to 17-12-2021 10-12-2021 to 12-12-2021 | Tripura University (Online mode) Central University of Jharkhand |
| | Participation | Astrophysics and Space | 12-12-2021 15 April, 2021 | (Online mode) Belgium |
| | - | Research (CASR-2021) | • | C |
| Pralay Kumar | Participation | 2 nd International Conference on Advances of Plasma Science and Technology (ICAPST-2020) | 27-29 May, 2021 | Department of Physics, Shri Shakthi Institute of Engineering and Technology, Shakthi Nagar, Coimbatore- 641062, Tamil Nadu |
| Karmakar | Participation | 8 th International Conference on Astrophysics and Space Science (APSS-2021) | 04-06 December, 2021 | Sanya, China, during 04-06 December, 2021. |
| | Participation | 7 th North-East Meet of Astronomers 2020 (NEMA- VII) | 27-29 January, 2022. | Department of Physics, Rajiv Gandhi University, Rono Hills, Doimukh, Arunachal Pradesh- 791112 |

| | Participation | 3 rd International Conference | 18-19 | University of |
|--------------|---------------------------------------|---|-----------------------------|--|
| | | on Physics | February, 2022 | Tarino, Tarino, Italy, Rome |
| Jugal Lahkar | Paper presentation | National Seminar on Recent trends in Physics Research | 21-22 Feb,2022 | Dept.of Physics, Manipur University |
| 0 | Paper presentation | National Symposium | 1 march,2022 | Dept.of Physics, Tezpur university |
| | Contributory talk | Beyond Standard Model: From Theory to Experiment (BSM- 2021) | 29.03.2021 to 02.04.2021 | The Center for Fundamental Physics (CFP) at Zewail City of Science and Technology and Fa culty of Engineering and Natural Sciences at Sabancı University.(Online) |
| M.M. Devi | Contributory talk, poster | The 22 nd International Workshop on Neutrinos from Accelerators. 6-11 Sep 2021 | 06.09.2021- 11.09.2021 | INFN, Cagliari, Italy (Online) |
| | Contributory talk | 37 th International Cosmic Ray Conference | 12.07.2021- 23.07.2021 | International Union of Pure and Applied Physics, DESY Germany (Online) |
| | Contributory poster, Session Chair | National Conference on Emerging Trends in Physics- 2021 (NCETP-2021) | 16.06.2021 – 17.06.2021 | Tezpur University (Hybrid Mode) |
| | Session Chair | Northeast Astronomer's Meet-2021 (NEMA-2021) | 27.01.2022 – 29.01.2022 | Rajiv Gandhi University, Itanagar (Online) |

Invited Talk

| Name of | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|-----------|------------------------|-------------------------|------------|-----------------------|
| Faculty | | | | |
| Member | | | | |
| | Statistical Methods in | VIRTUAL SCHOOL ON | 31.08.2021 | IISc, IIT Kanpur, IOP |
| | High Energy Physics | FLAVOR STRUCTURE | – 12. 09. | Bhubaneswar, IIT |
| | (3 lectures) | OF THE STANDARD | 2021 | Kharagpur (Online) |
| M.M. Devi | | MODEL | | |
| | Simulation of Water | School on Detector | 26.10.2021 | IUAC (Online) |
| | Cherenkov detectors (3 | Simulation using Geant4 | _ | |
| | lectures) | | 29.10.2021 | |

Awards/Honours/Notable Achievements

| Name of | Designation of | Achievement | Event/Awarded by |
|----------------|---------------------|-------------------------|-------------------------------|
| Awardee | Awardee | | |
| Mrinal Kumar | Professor | Member, Governing Body, | Nominated position |
| Das | | IUAC, New Delhi | |
| Rupjyoti Gogoi | Assistant Professor | Councilor, ASI | Elected position |
| Abinash Medhi | Research Scholar | IUPAP | 37th International Cosmic Ray |

| | | Young Scientist Awards Program for ICRC 2021 | Conference |
|---------------|------------------|---|--|
| Abinash Medhi | Research Scholar | | National Symposium on National Science Day, March 1, Department of Physics, Tezpur University. |

Number of Students Qualified in NET-JRF/SLET/GATE etc.

| Name of Qualifying Examination | Number of Qualified Students | Academic Programme |
|--------------------------------|------------------------------|--------------------|
| NET | 01 | M.Sc. |

Notable Placement of Students

| Name of Student | Academic | Placement | Company/ Organization | Mode of |
|-------------------|-----------|---------------------|-----------------------------------|------------|
| | Programme | Designation | | Selection |
| Biswajit Dutta | M. Sc. | Assistant Professor | D.R. College, Golaghat (in 2021) | Off-Campus |
| Jyotismita Doley | M. Sc. | Assistant Professor | Suren Das College, Hajo (in 2021) | Off-Campus |
| Naba Kumar Kalita | M. Sc. | Assistant Professor | Suren Das College, Hajo (in 2021) | Off-Campus |

Enrollment of Students in other Institutes for Higher Studies

| Name of Student | Academic Programme | Name of other Institute | Enrolled Academic Programme |
|----------------------|-----------------------|---------------------------------|--------------------------------|
| Dhritishman Hazarika | Int. M.Sc. | University of Tubingen, Germany | M.Sc. |
| Mrinal Jyoti Powdel | Int. M.Sc. | ICTS-TIFR, Bangalore. | Int. Ph.D. |
| Debasish Dutta | Int. M.Sc. | IIT, Palakkad | M.Sc. programme |
| Devidutta Gahan | M.Sc. | University of Cagliari | Ph.D. programme |

CENTRE FOR DISTANCE AND ONLINE EDUCATION

About the Centre

The Centre for Distance and Online Education (CDOE), rechristened as per the UGC (Open and Distance Learning Programmes and Online Programmes) Regulations, 2020, from "Centre for Open and Distance Learning" (CODL), was established in 2011 with the objective of disseminating knowledge and imparting quality education in the open and distance learning mode. As the UGC Regulations 2020 has been adopted at TU, online programmes too are being introduced at the earliest possible opportunity. Currently, the Centre offers various post-graduate, post-graduate diploma and certificate programmes in the emerging areas of social sciences, management and humanities with a flexible and learner-friendly teaching-learning system. The Centre strives to facilitate high-quality learning for those who cannot avail themselves of higher education in the conventional mode and those who look upon learning as a life-long activity. The academic programmes are carefully designed keeping in mind the need of the hour, and courses are updated regularly based on the feedback of stakeholders such as students, teachers, parents, academicians, and employers. Study materials are authored/edited by qualified and experienced faculty members and are made available to the learners so that they can devote their quality time to the focused areas of learning. In order to meet the aspirations of the learners, the Centre extends every possible support and guidance for which necessary infrastructure is in place. The Centre is committed to making education accessible to the masses and creating high-grade human resources in an affordable manner.

| Academic Programme | Student Intake |
|--|----------------|
| MA in English | 41 |
| MA in Sociology | 67 |
| MA in Mass Communication and Journalism | 17 |
| Diploma in Human Resource Management | 34 |
| Diploma in Environmental & Disaster Management | 10 |
| Diploma in Child Rights and Governance | 10 |

Academic Programmes and Student Intake

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------|-----------------------|---|---|------------------------------------|---|
| Assistant | Suchibrata Goswami | Ph.D, Dibrugarh University | American Literature, Life writing, Women studies | suchitu | 09-08-2017 |
| Professor | Madhusmita Boruah | Ph.D, Tezpur University | Advertising and Public Relations | madhu | 03-12-2018 |
| Guest Faculty | Dhriti Sonowal | M.Phil M.Phil, JNU | Social Stratification | dhritis | 22-02-2021 |

Officers and Staff Members

| Designation | tion Name <email>@tezu.ernet.in</email> | | Date of holding the | |
|---------------------|---|-----------------------|---------------------|--|
| | | | current position | |
| Director | Rajeev K Doley | rkdoley, cdoedirector | 29-09-2020 | |
| Assistant Registrar | Partha Pratim Kalita | parthap | 07-12-2017 | |
| Office Assistant | Anita Ghosh | anitag_ta | 31-12-2017 | |

| Computer Operator | Kalpadroom Almanya | kalpa01 | 01-05-2019 |
|-------------------|--------------------|------------|------------|
| MTS | Mohan Saikia | mohans2015 | 28-10-2020 |

Publications by Faculty and Staff Members

Publication of Articles in UGC-CARE Listed Group I/Group II Journals

- Boruah.M (2022). Sad that public space is now an intolerant battleground. In *VIDURA, A Journal* of the Press Institute of India, Volume 14, Issue 1, January-March
- Doley, Rajeev K. (2022). Tezpur University: The Educational Luminary in the North-East India. *University News:A Weekly Journal of Higher Education*, Volume 60, pages 15 – 17

Publication of Books

• Goswami, S. and Sarma, J. (2022) Intellectual Property Rights. Kalyani Publishers, Delhi.

Publication of Book Chapters

- Goswami, S. A. (2022). Journey from 'Defined' to 'Definer': The Politics of Memory in *Paradise*. In Das, N, editor, *Contours of Black Literature*, Volume -I, pages 119-129. ABS Books-Delhi 2022. ISBN 978-93-91002-95-4
- Doley, Rajeev K. (2021). Tabu Taid in the Making of Bhupen Hazarika's Miri Jiyori. In Borgohain, Homen, Neog, Milan, and Payeng, Sadananda, editors, *Mising Navajagoronor Utgata Asom Gaurav Tabu Taid*, pages 190 – 199, ISBN:978-93-82680-53-6. Anundoram Borooah Institute of Language, Art and Culture.

Publication of Articles in Other Forms

- Boruah. M (2022). Understanding geopolitics and India's role. *Assam Tribune*, Editorial page, dated 29/03/2022
- Boruah.M (2022). Media Education and National Education Policy, 2020. Assam Tribune, Editorial Page, dated 01/02/2022
- Goswami, S. E-Content Development and Copyright. Assam Tribune. 2488. Page 6, 2021 29/08/2021

Invited Talk

| Name of | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|------------|--------------------------|--------------------|------------|-------------------------|
| Faculty | | | | |
| Suchibrata | Intellectual Property | Celebration of | 23-04-2021 | IQAC, Furkating College |
| Goswami | Rights and Importance of | World Book and | | |
| | Copyrights in Academics | Copyright Day | | |

Conference/Workshop/Symposium/Seminar attended

| Name of Faculty/ | Purpose of | Title of Event | Date/ | Organizer and Venue |
|------------------|-------------------|------------------------------|------------|----------------------|
| Staff Member | Attending | | Period | |
| Suchibrata | Participated | NEP 2020: Changing role of | 24-03-2022 | STRIDE- IGNOU, New |
| Goswami | | Teachers in Distance and | to | Delhi (Online) |
| | | Online Learning' | 26-03-2022 | |
| Rajeev K. Doley | Presented | Webinar/Outreach on | 19-04-2021 | Fulbright India |
| | | Fulbright-Nehru and other | | Commission (Online) |
| | | Fulbright Fellowships | | |
| Rajeev K. Doley | Participated | Webinar on International Day | 03-12-2021 | Centre for Inclusive |
| | | of Persons with Disabilities | | Development, Tezpur |

| | | | | University (Online) |
|--|--|--|--|---------------------|
|--|--|--|--|---------------------|

TEACHING LEARNING CENTRE

About the Cell

The Teaching-Learning Centre (TLC), Tezpur University, was formally inaugurated on January 28, 2016, as a Centre of Excellence for Curriculum and Pedagogy under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) scheme. The scheme was launched by Department of Higher Education, Ministry of Education (formerly MHRD), Govt. of India. TLC envisages developing and promoting a responsive and relevant teaching-learning system for higher education communities and contributing to excellence in teaching and learning as an innovative and resourceful Centre through reflective research-based practice and the optimal use of technology. Due to the unprecedented situation created by the COVID-19 pandemic, TLC had to switch to fully online training programs. Besides keeping in view the need of the teaching community, TLC conducted several ICT training programs to enable the teaching community for online teaching. TLC collaborated with 11 colleges of Assam to train their faculty members for ICT Based Pedagogy.

Altogether, the Centre conducted 24 online training programmes this financial year, including two refresher courses and two faculty induction programs. During this period, TLC,TU, trained more than 1900 teachers and prospective teachers from across the country. Through these programmes, TLC has provided assistance and support for promoting best practices in teaching-learning environment among higher education communities. The areas of focus of the activities are teaching-learning pedagogy, curriculum development, training on ICT-based pedagogy, assessment, and evaluation. Two interdisciplinary Refresher Course were also conducted during this period in online mode.

Major Facilities and Equipment available

• ICT LAB with 25 PCs

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|--------------------|---------------------------------|---|--|------------------------------------|---|
| Director | Subhrangshu Sekhar Sarkar | PhD (Tezpur University) | Accounting, Taxation, Social Development | Subh | 20-04-2021 |
| Deputy Director | Bipul Kumar Sarmah | Ph.D (Tezpur University) | Theory of Partitions; Ramanujan Mathematics | bipul | 31-12-2021 |
| Assistant | Swapnarani Bora | Ph. D (Dibrugarh University) | Assamese and Cultural Studies | swapnabora | 24-05-2016 |
| Professor | Ikbal H. Ahmed | M. Phil. (Delhi University) | Philosophy and Education | <u>ikbal</u> | 02-06-2016 |

Faculty and Staff Members

Publications by Faculty and Staff Members Publication of Articles in UGC-CARE Listed Group I/Group II Journals

• Bora, Swapnarani. (2022). Cutter-wardor xobdokox aru dugoraki missionary mohila. *Satsori*, 17(9):83-90

Publication of Book Chapters

• Bora, Swapnarani. (2022). Tathya-projuktir madhyomere axomiya bhaxar xomriddhi. In *Anukhilan*, pages 49–56, ISBN:978-93-94095-45-8. Mahabir Publication, Dibrugarh.

Publication of Articles in Other Forms

- Ahmed, I. H.(2022). Animal Rights. In Applied Ethics, pp.157-172, IGNOU, New Delhi
- Ahmed, I. H.(2022). Truth and Validity. In Logic, pp.90-112, IGNOU, New Delhi
- Ahmed, I. H.(2022). Propositional Logic. In Logic, pp.298-327, IGNOU, New Delhi

| Name of | Title of the Talk | Title of the Event | Date | Organizer and Venue |
|--------------------|--|--|--------------------------|--|
| Faculty Member | | | | |
| Swapnarani Bora | OER with special reference to Assamese language | Departmental Webiner on OER | 16-06-2021 | Department of Assamese, Kaliabor College (ONLINE) |
| | Mukto xikhyon xomol: Aahoron aru byobohar | Webiner on Open Educational Resources | 19-06-2021 | IQAC & Dept. of History, HPB Girls, College (ONLINE) |
| | Mukto xikhyon xomol: Aahoron aru byobohar | Webiner on Open Educational Resources | 22-06-2021 | IQAC & Dept of Assamese, Teok CKB College (ONLINE) |
| | Use of OER in Education | Webiner on Open Educational Resources | 03-07-2021 | IQAC & Dept of Assamese, Sapekhati College (ONLINE) |
| | OER and Digital Learning Platforms for Education | Seven-Day Online FDP on " Research Ethics and Academic Writings in Social Sciences" | 01-07-2021 | Dhakuakhana College in Collaboration with Department of Sociology, Dibrugarh University |
| | Use of OER with special reference to Assamese language | National Level Workshop on OER | 01-06-2022 | IQAC & Dept of Assamese, Gargaon College (ONLINE) |
| Ikbal H. Ahmed | E-Content Creation and Dissemination of Resources | Invited Talk for P.G. Students of Law | 17-05-2021 18-05-2021 | Department of Law, Tezpur University |

Invited Talk

Conference/Workshop/Symposium/Seminar etc. Organized

| Title of Event | Level | Date/Period | Mode of |
|--|-------|---------------|---------|
| | | | Conduct |
| Online Workshop on Use of ICT Tools for Effective Teaching | State | 03-05-2021 to | Online |
| in Association with Gargaon College | | 07-05-2021 | |
| Online Workshop on Use of ICT Tools for Effective Teaching | State | 05-05-2021 to | Online |
| in association with Rangapara College | | 06-05-2021 | |
| Online Workshop on Use of ICT Tools for Effective Teaching | State | 10-05-2021 to | Online |
| in association with LTK College | | 11-05-2021 | |
| Online Workshop on Use of ICT Tools for Effective Teaching | State | 12-05-2021 to | Online |
| in association with Tihu College | | 13-05-2021 | |
| Online Workshop on Use of ICT Tools for Effective Teaching | State | 17-05-2021 to | Online |
| in association with Silapathar College | | 18-05-2021 | |

| Online Workshop on Use of ICT Teels for Effective Teeching | State | 21-05-2021 to | Online |
|---|------------|---------------|--------|
| Online Workshop on Use of ICT Tools for Effective Teaching | State | | Onnne |
| in Association with S.B.M.S.College, Sualkuchi | Ct. t. | 22-05-2021 | |
| Online Workshop on Use of ICT Tools for Effective Teaching | State | 24-05-2021 to | Online |
| in Association with IQAC, LOKD College | <u> </u> | 25-05-2021 | 0.1 |
| Online Workshop on Use of ICT Tools for Effective Teaching | State | 27-05-2021 to | Online |
| in Association with IQAC, Sibsagar Girls College | <u>a</u> | 28-05-2021 | 0.1 |
| Online Workshop on Use of ICT Tools for Effective Teaching | State | 31-05-2021 to | Online |
| in Association with IQAC, S. B. Deorah, College | | 01-06-2021 | |
| Online Workshop on Use of ICT Tools for Effective Teaching | State | 04-06-2021 to | Online |
| in Association with IQAC, Bhawanipur Anchalik College | | 05-06-2021 | |
| Online Interdisciplinary Refresher Course on Curriculum and | National | 07-06-2021 to | Online |
| Pedagogy | | 21-06-2021 | |
| Weeklong Online Workshop(FDP) on Online Evaluation | National | 22-06-2021 to | Online |
| Systems | | 26-06-2021 | |
| Weeklong FDP in Assamese: Issues of Exclusion in Assamese | National | 12-07-2021 to | Online |
| Literature | | 16-07-2021 | |
| FDP on Intellectual Property Rights in Academic Excellence | National | 12-07-2021 to | Online |
| | | 16-07-2021 | |
| Weeklong Online Faculty Development Program on Emerging | National | 26-07-2021 to | Online |
| Areas in Food Engineering and Technology | | 30-07-2021 | |
| Weeklong Online Faculty Development Program on Emerging | National | 26-07-2021 to | Online |
| Areas in Foreign Language Study | | 30-07-2021 | |
| Online Monthlong Induction Training of Faculty | National | 03-08-2021 to | Online |
| | | 02-09-2021 | |
| FDP in Emerging Areas in Molecular Biology and | National | 06-09-2021 to | Online |
| Biotechnology | | 10-09-2021 | |
| Two Day Online Workshop on Use of ICT Tools in Teaching | State | 14-09-2021 to | Online |
| Organized by TLC, Tezpur University in association with | | 15-09-2021 | |
| NEF Law College, Guwahati | | | |
| Ten Day Online Self-Paced Workshop on ICT tools for | National | 25-10-2021 to | Online |
| Effective Teaching and Learning | | 03-11-2021 | |
| Online Interdisciplinary Refresher Course On Pedagogical | National | 06-12-2021 to | Online |
| Innovations in Higher Education | | 20-12-2021 | |
| Online Weeklong Faculty Development Programme On New | National | 17-01-2022 to | Online |
| Trends in English Studies In collaboration with Department of | | 21-01-2022 | |
| English, Tezpur University | | | |
| Online Faculty Induction Program | National | 01-02-2022 to | Online |
| | | 01-03-2022 10 | |
| Online Weeklong FDP on ICT tools for Effective Teaching and | National | 14-03-2022 to | Online |
| Learning | 1 varional | 18-03-2022 10 | |
| Louining | | 10-05-2022 | |

Distinguished Visitors

| Name of the Visitor | Designation | Organization/Company | Date/Period |
|---------------------|-------------|----------------------|-------------|
| Ashis K Mukherjee | Director | IASST, Guwahati | 17-05-2022 |

CENTRAL LIBRARY

About the Central Library

The Central Library, Tezpur University, was established in 1994 along with the establishment of the University. The Library is housed at the center of the University campus in an aesthetically built threestoried building occupying an area of 4734 sq m. The library aims to be an ideal University library in the region as well as in the country. Central Library has a diverse collection of over one lakh books and journals. The Library is modernized with an RFID system, automated with the KOHA Open source software, an integrated multi-user library management system that supports all its in-house operations. The library maintains the research publications in Knowledge Repository (Institutional Repository) and Theses & Dissertations in an Electronic form in an ETD server. The collection of the library covers the latest information resources on all areas of Engineering, Science, Management, Social Science and Humanities. The library provides access to its e-resources and databases in a remote access facility through INFED Shibboleth. The Central Library is member of INFLIBNET Centres and DeLCon; through these Consortia library can access e-resources and databases. The library is also a member of DELNET and utilizes its services. Library users can access book database, thesis, journal database, ejournals and other e-resources from any computer within the University campus. In addition, the library has facilities for remote access to OPAC and other e-resources. The Central Library is an invaluable resource for students, researchers, and faculties of the University. The library delivers innovative information products, services and programmes of the highest quality that are integrated with teaching, learning and research activities. The library occupies a unique place in academic and research activities of the university. The mission of the library is to support and supplement learning, teaching and research programmes.

Opening Hours: The Library is open from 9.00 am–1.00am midnight throughout the year.

| Volume | Number | |
|--------------------------|--------|--|
| Books | 112928 | |
| Books added during | 3765 | |
| Print Journals | 91 | |
| EBooks | 361 | |
| E-Journals | 8700 | |
| Back Volumes of Journals | 10280 | |
| Online databases | 37 | |
| Thesis | 836 | |
| Dissertations | 1765 | |
| Braille Collection | 212 | |
| CDs | 2898 | |
| VCDs | 81 | |
| VHS Cassettes | 36 | |
| Newspaper/Magazines | 10 | |
| Manuscripts | 32 | |

Collections

Services

The Central Library provides the following services

- Self-issue/return of books with RFID system
- Remote access of Library e-Resources

- Book Bank Facility for EWS
- Reference Services.
- OPAC/WebOPAC /CD Lib. Catalogue
- EBooks (intranet/Internet).
- Current Awareness Service (Monday Morning, InfoJ, InfoGranth)
- New Arrival of Books
- Training cum Demo on Electronic Resources
- Online Renewal and Reservation of Books
- Photocopy Services
- Children Library Corner
- Library & Information Services to Outsiders on Request
- Research Support Services
- Plagiarism Check (Urkund/Turnitin)
- Document Delivery Services (DELNET, JCCC)
- Special services to differently able person.

Visitors

| Visitor category | Student | Research Scholar | Faculty member | Staff | Outsider | Total |
|----------------------------------|---------|-------------------------|----------------|-------|----------|-------|
| Average daily visitor (Physical) | 359 | 37 | 15 | 5 | 2 | 418 |
| Average Virtual Visitors | | | | | | 111 |

Events Organized

| Title of Event | Level | Date/Period | Mode of Conduct |
|---|-------|-------------|-----------------|
| Oxford Scholarship Online | Local | 29-05-2021 | Online |
| A Guided Tour of the Taylor & Francis eBooks | Local | 03-06-2021 | Online |
| SAGE online resources awareness workshop | Local | 02-06-2021 | Online |
| Orientation on Pearson e-Library | Local | 01-06-2021 | Online |
| User Awareness Session - eBooks on Cambridge Core | Local | 05-06-2021 | Online |

Officers and Staff Members

| Designation | 5 | | Date of holding the current position |
|------------------------|-----------------------|-----------|--------------------------------------|
| Librarian | Dr. Mukesh Saikia | librarian | 19-03-2012 |
| Assistant Librarian | Mr. Jitu Mani Das | jmdas | 25-08-2015 |
| Information Scientist | Mr. Anuj Kumar Singh | anujsingh | 31-03-2022 |
| Professional Assistant | Mr. Dipak Sarma | dsarma | 20-10-1995 |
| | Mr. Anjan Gohain | anjang | 11-04-2007 |
| Semi-Professional | Mr. Dipak Kr. Gogoi | dkgogoi | 09-02-2011 |
| Assistant | Mrs. Monmi Choudhury | monmi | 31-07-2012 |
| Library Assistant | Mr. Rajesh Kr. Sharma | rajesh | 09-02-2011 |
| | Mr. Ijaz Ahmed | ijazah | 16-09-2016 |
| | Mr. Sourav Kr Mahanta | souravk | 03-08-2018 |
| Lower Divisional Clerk | Mr. Pinchu Basumatary | pinchu7 | 11-04-2014 |
| Library Attendant | Mr. Mahendra Kr Nath | mknath | 24-12-1994 |
| Library Attendant | Mr. Manjit Tamuli | mtamuli | 02-07-2012 |
| MTS | Md. Derajuddin Ahmed | deraj | 01-03-1996 |
| MTS | Md. Ahmed ALi | ahmed | 01-03-1996 |
| MTS | Mrs. Kanaka Das | kanaka | 01-01-2008 |

CENTRE FOR INCLUSIVE DEVELOPMENT

About the Centre

One of the University's objectives as enshrined in the Tezpur University Act, 1993, is "to educate and train manpower in an equal learning space". In line with the spirit of this objective, the Centre for Inclusive Development was established in 2013 as a training and development centre. The Centre plays a catalytic role in uplifting the underprivileged students of the University through education, training, engagement and counseling. The Centre makes efforts to identify the areas requiring intervention and takes appropriate measures to address the issues. The Centre also offers a two-semester academic programme named *P.G Diploma in Child Rights and Governance* (started in 2016 in partnership with UNICEF) both in the conventional mode and Open and Distance Learning mode. Additionally, the Centre reaches out to the community outside the University's periphery and extends support to the needy people, particularly children and youth, through resource sharing, intellectual support and counseling. The Centre envisions engaging itself in various activities required for development of the underprivileged people, particularly in north-east India, in the future.

Academic Programmes and Student Intake

| Academic Programme | Intake |
|--|--------|
| Post Graduate Diploma in Child Rights and Governance (Conventional Mode) | 04 |
| Post Graduate Diploma in Child Rights and Governance (ODL Mode) | 10 |

Thrust Research Areas

• Child Rights and Governance

Major Facilities/Equipment available

- Computer Laboratory with 13 Desktop Computers
- Seminar Hall (80-seater)
- Multi-media projection system

Faculty Members

| Designation | Name | Highest Qualification (Institute) | Specialization | <email> @tezu.ernet.in</email> | Date of holding the current position |
|------------------------|---------------------|---|------------------|------------------------------------|--|
| Professor | Rajeev Kumar Doley | Ph.D. (IITG) | Sociolinguistics | rkdoley | 2014 |
| Assistant Professor | Subbhrangshu Dhar | Ph.D. (VBU) | Social Work | Sdhar | 2017 |
| Guest Faculty | KrishnamoniBordoloi | LLM (GU) | Human Rights | krishnabordoloi123 | 2020 |

Officers and Staff Members

| Designation | Name | <email>@tezu.ernet.in</email> | Date of holding the |
|-----------------------------|---------------------|-------------------------------|---------------------|
| | | | current position |
| Assistant Education Officer | Bhanu Panging Gogoi | bhanubj@tezu.ernet.in | 2013 |
| Multi-Tasking Staff | Mohan Saikia | | 2016 |

Publications by Faculty and Staff Members Publication of Articles in UGC-CARE Listed Group I/Group II Journals

• Doley, Rajeev K. (2022) Tezpur University: The Educational Luminary in the North-East India. *University News:A Weekly Journal of Higher Education*, 60 (Jan 10-16, 2022): 15 – 17.

Publication of Books

• Sarkar, A. K and Dhar, S. (2021). *Contextualizing Peace: Experiences of Contemporary India and Neighbouring Countries*. Manak Publications Pvt. Ltd. New Delhi.

Publication of Book Chapters

 Doley, Rajeev K. (2021) Tabu Taid in the Making of Bhupen Hazarika's Miri Jiyori. In Borgohain, Homen, Neog, Milan, and Payeng, Sadananda, editors, *MisingNavajagoronorUtgata Asom Gaurav Tabu Taid*. Pages 190 – 199. ISBN:978-93-82680-53-6. AnundoramBorooah Institute of Language, Art and Culture, Assam.

Conference/Workshop/Symposium/Seminar etc. Attended

| Name of | Purpose of | Title of Event | Date/ Period | Organizer and Venue |
|---------------|-------------------|---------------------------------|---------------------|------------------------|
| Faculty/Staff | Attending | | | |
| Member | | | | |
| Rajeev | Presented | Webinar/Outreach on Fulbright- | 19-04-2021 | Fulbright India |
| Kumar Doley | | Nehru and other Fulbright | | Commission (Online) |
| | | Fellowships | | |
| Rajeev | Attended | Webinar on International Day of | 03-12-2021 | Centre for Inclusive |
| Kumar Doley | | Persons with Disabilities | | Development, Tezpur |
| | | | | University (Online) |
| Krishna | Participant | FDP on Intellectual Property | 12-07-2021 to | Tezpur University |
| Bordoloi | _ | Rights | 16-07-2021 | (Online F/N) |
| Krishna | Participant | Course Behavioral Remodeling | 12-10-2021to | Electronics & ICT |
| Bordoloi | | & Use of ICT for Classroom | 19-10-2021 | Academy and IIT |
| | | Delivery of Teachers | | Guwahati. (Online A/N) |

Notable Placement of Students

| | Academic Programme | | L V | Mode of Selection |
|-----------|---------------------|-------------------|---------------|-------------------|
| Student | | Designation | Organization | |
| Joy Doley | PG Diploma in Child | Child Development | Government of | Off-Campus |
| | Rights & Governance | Project Officer | Assam | |

COMPUTER CENTRE

About the Centre

The University has a well-equipped Computer Centre (CC) with the latest configured Desktop Personal Computers (PCs) spread over two units of laboratories supported by high-end servers and a host of the latest software packages. The resources procured through the CC are used mostly for computational & laboratory purposes and sometimes for skill tests, online interviews, workshops, etc. The Computer Centre (CC) serves the whole university with ICT services. It is the main ICT resource centre for the whole University. Computer Centre maintains and offers two well-equipped Computer Laboratories with modern computational capabilities. Computer Centre also serves as the support system for the University Community in the terms of Computing Hardware, Software and Network related activities. There is a constant endeavour to envisage better services under its umbrella. The campus-wide Local Area Network (LAN) is equipped with a 10Gigabit backbone and high-speed Switching Network Devices. Most of the components in its Local Area Network (LAN) are Internet Protocol (IP) based and therefore have its manageability mostly centralized.

Along with all departments, offices, hostels, facilities now residential apartments have been extended with WiFi facilities. Almost all Internet services like Email, WWW, Proxy, Software applications are fully hosted in-house with its own set of servers and storages and run on a 24x7 basis in a dedicated air-conditioned environment. Several applications developed in-house by the Computer Centre Staff are used extensively in automation of Administration, Academic Departments, and other user departments. Computer Centre has recently acquired HPC cloud-based infrastructure and modernized it with latest applications. The Computer Centre has a multifunctional 70-seater state-of-the-art Video Conferencing cum classroom facility for Online Meetings, Interviews, conferences, and Virtual Classes etc. Furthermore, a recording studio cum virtual classroom is also operational to aid in recording and preparation of audio/video lectures and conducting online classes of the University.

| Programme | Student Intake |
|--------------------------|----------------|
| DOEACC 'O' Level Diploma | 30 |
| DOEACC 'A' Level Diploma | 20 |

Academic Programmes and Student Intake

Thrust Areas of the Centre

The primary goal of the Computer Centre is to provide quality ICT services including computational and internet facilities to the University community. In addition to maintenance of computational infrastructure, the following services are supported by the Computer Centre:

- Email & Internet Services
- Credit/audit practical courses of different Departments
- Organizing practical sessions for various workshops and refresher courses of various Academic Departments.
- Organizing training programmes for the University Employees
- Assist Administration in selection and procurement of computing resources
- Providing maintenance services for computers/peripherals to the Faculty/Staff /Departments
- Maintaining and monitoring the Campus LAN
- Maintaining and monitoring various Internet Links
- System Administration, Network Administration, and monitoring of various servers Email, Web,

Application, Database, Proxy, Firewall, etc.

- Maintaining University Website and intranet portal
- Develop, procure, and maintain software for administration and other sections of the University
- Software maintenance Services
- Providing presentation assistance in the auditorium and conference halls
- EPABX system administration and maintenance
- IP CCTV Surveillance Management

Major Facilities/Equipment Available

| Particulars | Hardware (Make/Model) | Qty |
|--|--------------------------------|------|
| Video Conferencing System | Polycom 8000 Series | 1 |
| VoIP Telephony System in collaboration with BSNL | Clixxo series Server and Media | 1set |
| and Clixxo Broadbands Pvt. Ltd. | Gateway | |
| Core Switch with 64 10G Ports | Cisco C6807-XL | 1 |
| Distribution Switch with 32 10GPorts | Cisco WS-C3850-24XS | 16 |
| Access Switches | Cisco WS-C2960X-24TD-L | 80 |
| | Extreme X350 48T | 56 |
| | Extreme X350 24T | 19 |
| | Allied Telesis AT-x510L-28GT | 11 |
| | Allied Telesis AT-x510L-52GT | 3 |
| | HP 2520G | 9 |
| Firewall | Huawei Eudemon 200E-X7 | 1 |
| Router (NKN) | Cisco ASR 1000 | 1 |

Servers

| Server Particulars | Hardware (Make/Model) | Operating System and Application Platform |
|------------------------------|-----------------------|--|
| Seconday Storage | HP StoreEasy 1650 | Windows Storage Server 2012 |
| Server | | |
| Email cum DNS Server | Dell PowerEdgeR730xd | CentOS 6.4/ Sendmail, Bind |
| Proxy/NAT/Firewall Server | Dell PowerEdgeR730xd | CentOS 6.4/ Squid Proxy 4.0 |
| Email Storage Server | Dell NX 3230 | Windows Storage Server 2012R2 |
| Proxy Storage Server | Dell NX 3230 | Windows Storage Server 2012R2 |
| Application Server | Dell PowerEdge 540 | Windows 2019 Server/ xampp |
| Database Server | Dell PowerEdgeR740xd | Windows 2019 Server/ MySql |
| Oracle 10g Database | IBM/X3560 | Windows 2008 R2 Server/Oracle10g DB |
| Video Streaming | IBM/X3650 +IBM/DS3524 | Windows 2008 R2 Server/Adobe Media |
| Serverwith Storage | | Server 5 |
| Web Server | IBM/X3560 | RHEL 6/Apache |
| Local Cloud Cluster | LENOVO /VX SERIES | VMware EXSI |

Computer Terminals & Peripherals Available

| Unit No | Unit Name/Location | Terminals & Peripherals |
|---------|---------------------------|--|
| Unit-0 | Central Computer Centre | Terminals = 60 (Core i5 /Windows 7 Pro./Windows 10 |
| | (Academic Building -2) | Pro. Desktops) Scanner = 2, Projector =1 |
| Unit-1 | Computer Centre-Cluster-1 | Terminals = 100 (Core i5 / Windows 10 Pro. Desktops) |
| | (SoE Complex) | Scanner = 1, Projector = 1 |

Software Subscriptions

| Packages | Renewal Period |
|--------------------------------|----------------|
| Microsoft Campus Agreement | Yearly |
| Kaspersky Total Space Security | Yearly |

Officers and Staff Members

| Designation | Name | <email></email> | Date of holding the |
|----------------------------|-------------------------|-----------------|---------------------|
| | | @tezu.ernet.in | current position |
| Director | Nityananda Sarma | nitya | 22-12-2020 |
| Computer Engineer | Dhiraj Kumar Sarma | dhiraj | 23-12-1999 |
| Junior Programmer | Dipak Chandra Choudhury | dcc | 27-08-2007 |
| | Jamil Ahmed | Jamil | 31-07-2018 |
| Senior Technical Assistant | Abani Kumar Das | Abani | 01-06-1998 |
| | Niranjan Kumar Deka | niranjan | 26-07-2018 |
| Technical Assistant | Manjul Baruah | manjul | 03-11-2004 |
| | Prandeep Borah | prandeep | 17-08-2012 |
| | Raghvendra Choudhary | raghav | 25-11-2016 |
| | Milan Kumar Deka | milan16 | 16-08-2019 |

Other Significant Activities of the Centre

- Setting up and using G-Suite for education to cater the need of anLMS (mainly Google classroom, Google meet) for online teaching-learning activities from academic session Autumn 2020 onwards (Covid-19 time) and still being used along with physical classroom sessions. More than 5000 user accounts are active at present.
- To cope with pandemic and growing need to work from home, Computer Centre has started rolling out WiFi services to quarters of Teaching Staffs and Other Officials.
- Computer Centre has also stepped into world of cloud computing with installation of infrastructure
- A state-of-the-art recording studio cum virtual classroom is also built to aid quality Audio/Video teaching/learning experience both in online and offline mode.
- Other important services rendered by the Computer Centre are the Campus Telephony System and the Video Surveillance System which runs over the Campus's LAN. The Internet facility is being facilitated through the high performance 1Gbps link of National Knowledge Network (NKN). The *Campus Connect WiFi* Scheme of the MHRD has been operational since 2017 mostly covers academic complexes, administration, student hostels and student activity areas with a user base of 4300. The WiFi services under this scheme is fully maintained and managed by dedicated company engineers.

ENGINEERING CELL

About the Cell

The Engineering Cell of the university was established in March 1995. It is assigned the prime responsibility of developing and maintaining the infrastructure in the University campus, covering an area of about 262 acres of land. The following are the major duties and responsibilities entrusted on the Engineering Cell:

- Allotment and execution of construction projects involving civil, electrical, water
- supply and sanitary works.
- Maintenance and repairing of buildings and roads.
- Maintenance of power supply to the university campus.
- Maintenance of water supply to all the buildings including hostels and canteens.
- Preparing of agenda notes and writing minutes of Building Committee meetings.
- Maintenance and development of the University campus.

Construction Activities

The following construction activities were accomplished during 2020-21.

- Construction of RCC 3storied 180 capacity Girls Hostel
- Repairing of 02 nos. of Basketball court.
- Repairing of Lawn tennis court.

Work Done with Tender process

- Nine building projects which includes Academic Buildings & Hostels under HEFA funding is in construction stage under Assam PWD
- Renovation of Academic Building No. I & II
- Repairing and Restoration of damaged portion of Boundary Wall.

Power Supply

The Govt. of Assam has sanctioned 2 MW of power to Tezpur University. This power is released to the university by APDCL as per the load demand. Currently, the university is drawing 1500 KW (1.5MW) from the 132/33 KV Depota Grid Sub-Station of APDCL through a 13.50 KM long dedicated power line. This power is received at the university end through a 2 x 2.5 MVA, 33/11KV Sub-Station constructed by the university and is distributed through an 11KV H.T. Ring Main connected to 4 nos. of Sub-station of capacity 2 x 315 KVA, 11KV/0.433 KV located at peak load centers inside the campus. During 2019-20, the total hours of interruptions in supply of power to the university was 214.50 hours. Out of this maintenance shut down availed by the university was 18 hours, which was rather insignificant considering the present power crisis in Assam.

Solar Power

The University has 1MW capacity Roof top Solar panels installed at different locations within the campus. The electricity generated from solar is directly fed to the APDCL grid. This system resulted in reduction of electricity bill served by APDCL. The net saving in amount of electricity bill plus payment made to the Solar Company is about Rs. 39.86 lakh for the said year.

Water Supply

Four deep tube-well, each 102 meters deep, associated with submersible pumps were installed in the University campus to access ground water. The treatment plant consisting of aerator, flush-mixture, sedimentation tan, filter unit, chlorination, underground clear water constructed for proper treatment of raw water. Two overhead reservoirs (OHR) of capacity 3.0 lakh liter and 3.50 lakh liters were constructed to store treated water. Water from the OHR reaches the consumer points through a pipe-line network under the gravity flow. The present requirement of water in the university campus is more than 10.00 lakh liters per day. The demand is likely to increase with the increase of new Academic Buildings, Hostels and Residential Buildings. There was no instance of interruption in supply of treated water during the concerned year.

| Designation | Name | Highest Qualification | <email></email> | Date of |
|---------------------|------------------------|-------------------------|-----------------|-------------|
| | | (Institute) | @tezu.ernet.in | holding the |
| | | | | current |
| | | | | position |
| Executive Engineer | R.R. Hazarika | BE (Civil) | rrhz | 06-05-2011 |
| Assistant Engineer | Jadav Ch. Nath | BTCM | jnath | 21-01-2011 |
| | Gobinda Kalita | Diploma in Electrical | gobinda | 26-03-2012 |
| | | Eng. | | |
| Junior Architect | Rashmi Dutta | Diploma in Architecture | rashmidh | 16-02-1995 |
| | | Assistantship | | |
| | Debasish Borkotoky | Diploma in Electrical | dborkataky | 04-02-2002 |
| | | Eng. | | |
| | Sapon Goswami | Diploma in Civil Eng. | sapon | 06-05-2011 |
| | Sailendranath Talukdar | Diploma in Electrical | sailen | 01-05-2013 |
| | | Eng. | | |
| Assistant | Dhiren Kr. Kalita | MĂ | dhiren | 29-12-2017 |
| Electrician | Pradip Nath | ITI | pradipn | 01-03-1997 |
| | Himanendra Khatanair | ITI | himan | 19-03-2015 |
| Pump Operator | Sanjay Dutta | ITI | sanjayd | 12-02-2002 |
| | Mriganka M. Das | ITI | mmdas | 12-10-2015 |
| Multi Tasking Staff | Tarani Das | X Pass | taranid | 01-06-1995 |
| | Prabhat Keot | VII Pass | parbhat | 19-01-1995 |
| | Mukul Ch. Handique | IX Pass | mukul | 01-03-1998 |
| | Mon Bahadur Chetry | VII Pass | mbchetri | 01-01-1995 |
| | Mohammad Ali | VIII Pass | mdali | 01-01-2008 |

Officers and Staff Members

HEALTH CENTRE

About the Centre

The Health Centre of Tezpur University has been functioning since 1995. It provides health care services mainly to the students, faculty members, staff, their families, and involved with the University. At present, we have over 6000 beneficiaries.

Major Facilities/Equipment available

The Health Centre offers OPD services, and ten beds are available to provide initial care to indoor patients, including emergency cases. One Medical Officer is always available for 24hrs emergency duty. The cases requiring hospitalization are referred to the referral Hospitals at Tezpur. Ambulance service is available round the clock and is free of cost for students. There are three ambulances available at present, and one is specifically for PWD candidates to attend to their classes with a payment of a nominal charge. A stock of common medicines, including lifesaving drugs, is maintained, and is supplied free of cost. Routine laboratory investigations are also done. Additionally following equipment are available:

- An Autoanalyser (fully automatic)
- Hormone Analyser (Mini-Vidas)
- ECG
- X-ray
- Appliances for a person with disability.

OPD timings

| Session | Morning | Evening |
|-----------------------|-------------------|--------------|
| April to September | 8.30AM to 12.30PM | 4 PM to 6 PM |
| October to March | 8.30AM to 12.30PM | 3 PM to 6 PM |
| Saturdays and Sundays | 10 AM to 12 NOON | |

Visit by Specialists

The University has engaged Specialists of different disciplines (Paediatrics, Obstetrics and Gynaecology) who regularly visit the Health Centre on different days of the week for the benefit of the University community. A Clinical Psychologist is also regularly available on working days at the DSW office to provide counselling on stress-related problems. In addition, a Physiotherapist visits the Health Centre twice a week for offering physiotherapy to the differently abled students and other patients.

Officers and Staff Members

| Name | Designation | Highest Qualification | Status | Date of holding the current position |
|----------------|-----------------------|--------------------------------|-----------|--|
| J.S.Goswami | СМО | MBBS, DLO | Permanent | 07-01-2008 |
| R.Boro | MO | MBBS | Permanent | 20-01-2021 |
| B. Barman | MO | MBBS | Contract | 27-08-2020 |
| M. Rahman | Sr. Consultant | MD (Paediatrics) | Visiting | 29-01-2008 |
| Purnima Das | Consultant | MBBS, DGO | Visiting | 18-11-2019 |
| Utpal Bora | Physiotherapist | MPT | Visiting | 16-09-2015 |
| Asish P Bora | Clinical Psychologist | M.Phil. in Clinical Psychology | Contract | 01-02-2022 |
| Eliza H. Barla | Nurse | Diploma GNM | Permanent | 10-01-2002 |

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| Amrita Purty | Nurse | Diploma GNM | Permanent | 07-08-2012 |
|------------------|-----------------|--------------------|-----------|------------|
| Pranab Baruah, | Pharmacist | D. Pharm. | Permanent | 22-06-1998 |
| Anuj Baruah, | Lab. Technician | BA, CMLT | Permanent | 05-06-1998 |
| Niramoni Das | Lab. Technician | Certificate in ANM | Permanent | 31-12-2010 |
| Hiten Debnath | Radiographer | DMRT | Contract | 14-08-2013 |
| Manoj K Saikia | MTS | 10 th | Permanent | 01-03-1996 |
| Jiten Rajbongshi | MTS | 9 th | Permanent | 01-04-1997 |

Major Activities

- The Medical Officers visit the hostels and canteens to assess the overall hygiene of the dining hall and the drainage system of the surroundings to check for any outbreak of waterborne diseases.
- Fogging on the campus was done on 19-08-2021 to prevent any outbreak of mosquito-borne diseases.
- The Medical Officers regularly attended KV, TU as a VMC member and selection committee member to select Counsellor and Nurse.
- During Covid -19 Pandemic period, various suggestions and advices were given to the TU Covid-19 Task Force and patients.
- Pulse Polio Immunization camp was organized on the campus as per directive of the Govt. on 28-02-2022
- Covid -19 screening was done as per the direction of the district authority for the Tezpur University community and for guests who visited Tezpur University.
- Covid-19 Vaccination camps were held at Health Centre on 09-04-2021, 10-05-2021, 22-06-2021, 23-06-2021, 17-09-2021, and 25-09-2021 respectively.
- Blood donation camp was held at Health Centre on 19-02-2022 in collaboration with Indian Red cross Society and with assistance of Tezpur Medical College prior to the visit of Hon'ble President of India during convocation.
- A lecture was given to MCJ students by Dr. Rupom Boro, MO, regarding awareness activities for promotion of good health.
- Laboratory practical classes related to common blood tests were demonstrated by Mr. Anuj Baruah, Lab. Technician, Health Centre for the Integrated MSc. Students of MBBT dept. on 25-11-2021 & 26-11-2021.
- A lecture was given to women of nearby surrounding area related to maternal health & hygiene.

HORTICULTURE CELL

About the Cell

The Horticulture Section of Tezpur University is entrusted to carry out plantation, landscaping, and beautification activities inside the University campus. The Assistant Horticulturist of the Horticulture Section looks after the day-to-day landscaping and maintenance activities of the University with the guidance from the Campus Horticultural Committee with a faculty Coordinator. The annual horticultural activities during the concerned period were:

Plantation Programme

More than 1200 plant saplings of different species (like ornamental plants/shrubs, fruit trees and medicinal plants etc.) were planted in different parts of the University campus, which include the Administrative Building, Tezpur University Botanical Garden, Cafeteria, Guest House, Auditorium, Library, Additional plot, School of Engineering, School of Management Science, New water treatment plant, the Kendriya Vidyalaya, TLC Building, HSS Building, near University Entrance gate, *Citrus* garden I & II, along roads of residential area and other locations, through routine and special plantation program organized by the Horticulture Section on various events/occasions with active participation from university communities.

Maintenance of Plantations

Apart from the maintenance of gardens, all previously planted trees (like roadside and other plantations) in different locations of the University campus were regularly nurtured by cleaning, fertilization, and watering.

Maintenance of the Gardens and Landscape

In addition to new plantation drives and landscaping/beautification activates, all essential maintenance work (like lawn, hedge, existing plants/shrubs, growing of seasonal flowers) for previously developed flower and other gardens and other locations of the University campus were done regularly.

Maintenance of House Plant Pots for Indoor Decoration

Considering the different benefits of house plants, more than 1300 House plant pots were placed in the interior space of different Administrative offices and Academic building, Guest House, Library, Auditorium, VC's residence and other amenity centers for beautification, greenery and purifying air. Essential maintenance works of these house plants were carried out regularly.

Maintenance of Vermicompost Unit

A Vermicompost unit has also been running successfully to fulfill the need of organic manure for plantation/gardening work of the University. Vermicompost is produced entirely from leaf litters collected throughout the University campus. About 37 quintals of vermicompost was produced during the concerned year. Essential maintenance works of the Vermicompost Unit were carried out throughout the year.

Maintenance of the Departmental Nursery

The Horticulture section has a nursery, which is the source of seedlings of ornamental/avenue trees and shrubs, fruit trees, shrubs, valuable timber trees, indoor plants of different types and also some seasonal

flowers for the use of the University. It is located within the premise of the Botanical Garden. Essential maintenance works of the nursery were carried out throughout the year.

Other Activities

In addition to the above, cleaning (by jungle cutting) of different parts of University campus like surroundings of the Administrative Building, different Offices and Academic Buildings, the Library, the KBR Auditorium, the Guest House, the Chandraprabha Saikianee Bhaban, the Community hall, the Shopping Complex/Day Care Centre, the Children park, the Takshashilla Vidyapeeth, the Kendriya Vidyalaya, the Car parking area, and both sides of different roads, including boundary and footpath, were done from time to time.

Officers and Staff Members

| Designation | Name | Highest | <email></email> | Date of |
|--------------------------|---------------------------|---------------|-----------------|-------------|
| | | Qualification | | holding the |
| | | | | current |
| | | | | position |
| Faculty Coordinator | Satya Sundar Bhattacharya | PhD | satya72 | 25-09-2021 |
| Assistant Horticulturist | Girindra Hazarika | MSc | girin | 16-07-1997 |

SOPHISTICATED ANALYTICAL INSTRUMENTATION CENTRE (SAIC)

About the Centre

Instrumental methods of analysis are an indispensable aspect of research and development. Tezpur University has several departments and centres working in diverse areas that require sophisticated analytical equipment. Sophisticated Analytical Instrumentation Centre (SAIC), Tezpur University, has been set up to cater to these needs. The Centre extends these facilities not only to users in the university, but also to other educational institutions and industries in the north-east region and beyond, as many do not have the resources to procure and maintain such sophisticated instruments. The Centre also provides demonstration of instruments and their utility in different fields of research to the UG/PG students of colleges. The Centre was established in 2010 with two equipment, High-performance liquid chromatography (HPLC) and Gel permeation chromatography (GPC). Twenty-five types of equipment including Transmission electron Microscope (TEM), Scanning Electron microscope (SEM), Single crystal XRD, Powder XRD, BET (Surface and Pore size analyser), Raman Spectrometer, Fourier Transform Infrared Spectrometer (FTIR), Atomic absorption spectrometer (AAS), Nuclear magnetic resonance spectroscopy (NMR), and Bomb calorimeter are currently housed and maintained by SAIC. The centre also focuses on installing many sophisticated equipment like XPS, HR-MS, Confocal Microscope, etc. in the near future.

| Equipment | Model | Date of |
|----------------------------|--|--------------|
| | | Installation |
| Transmission Electron | Make: FEI Company, USA | 22-10-2013 |
| Microscope | Model: FEI 200KV TEM model Tecnai G2 F20 S-TWIN | |
| BET Surface Analyzer | Make: Quantachrome, USA | 15-06-2011 |
| - | Model: ASiQC0000-4 | |
| Powder X-ray | Make: Bruker AXS, Germany | 02-11-2012 |
| Diffractometer | Model: D8 Focus | |
| Single Crystal X-Ray | Make: Bruker, Germany | 04-07-2012 |
| Diffractometer | Model: AXS SMART APEX-II | |
| High Performance Liquid | Make: Waters Corporation, USA | |
| Chromatography | Model No.: a. UV/Visible Detector-2489 | |
| | b. Refractive Index Detector-2414 c. HPLC Pump-515 | 08-06-2011 |
| Gel Permeable | Make: - Waters Corporation, USA | |
| Chromatography | Model No.: a. UV/Visible Detector-2489 | |
| | b. Refractive Index Detector-2414 c. HPLC Pump-515 | 09-06-2011 |
| Atomic Absorption | Make: Thermo Scientific, UK | 18-09-2012 |
| Spectrometer | Model: (a) AAS-ICE 3500 | |
| Raman Spectrometer | Make: Renishaw, United Kingdom | 12-10-2012 |
| _ | Model: inVia (514 Lase) | |
| Fourier Transform Infrared | Make: Perkin Elmer | 29-01-1998 |
| Spectrometer | Model No.: Spectrum 100 | |
| CHN Analyzer | Make: Perkin Elmer, USA | 24-09-2006 |
| | Model No.: 2400 Series 2 | |
| Thermal Analyzer (TGA- | Make: SHIMADZU(Asia Pacific) | 26-05-2006 |
| DSC) | Model No.:TGA-50 & DSC-60 | |
| Nuclear Magnetic | Make: JEOL, Japan | 08-04-2010 |
| Resonance | Model: ECS-400 | |
| Scanning Electron | Make : JEOL, Japan | 18-11-2008 |
| Microscope | Model: JSM 6390LV | |

| Major Facilities and | l Equipment available |
|-----------------------------|-----------------------|
|-----------------------------|-----------------------|

Tezpur University:: Annual Report 2021-22(Sophisticated Analytical Instrumentation Centre)

| UV-Visible Spectrometer | Make: Shimadzu Corporation Japan Model: UV 2450,206-55672-34 | 13-06-2008 |
|-------------------------|---|------------|
| X-Ray Diffractometer | Make: Rigaku Corporation,Japan Model: MINIFIEX | 18-10-2006 |

Conference/Workshop/Symposium/Seminar etc. Organized

| Title of Event | Level | Date/ Period | Mode of |
|---|-------|---------------------|---------|
| | | | Conduct |
| Training & Demonstration of TEM instrument | Local | 29-03-2013 to | Offline |
| | | 30-03-2013 | Omme |
| Presentation on Fast SAXS studies of Sensitive Biological samples | Local | 08-06-2017 | Offline |
| Advancement of Mechanical Measurement and Analysis | Local | 27-11-2017 | Offline |
| Technical Presentation on Small Angle X-Ray Scattering(SAXS) | Local | 04-09-2018 | Offline |
| system | | 04-09-2018 | Onnie |
| RAMAN Spectrometer | Local | 11-03-2019 | Offline |
| Dynamic Light Scattering | Local | 19-02-2020 | Offline |
| Training on Analytical Instruments | Local | 09-03-2021 to | Offline |
| | | 15-03-2021 | Onnne |

Officers and Staff Members

| Designation | Name | <email></email> | Date of holding the |
|---------------------|--------------------|-----------------|---------------------|
| | | @tezu.ernet.in | current position |
| Head | Prof. Pabitra Nath | pnath | 2020 |
| Technical Officer | Dr. Ratan Boruah | rboruah | 2021 |
| Technical Assistant | Prakash Kurmi | pkurmi | 2012 |
| | Nava Kr. Gogoi | navag | 2010 |
| | Tridip Ranjan Nath | trnath | 2016 |
| Multitasking Staff | Mohendra Das | mohen13 | 2018 |

PROGRAMMES ORGANISED BY TEZPUR UNIVERSITY

130th Birth Anniversary of Dr. B. R. Ambedkar: The birth anniversary of Bharat Ratna Babasaheb Dr. B. R. Ambedkar was celebrated on 14th April 2021 on the Tezpur University campus. Amid the ongoing Covid-19 situation, the day was observed with a short programme of offering floral tributes and distribution of sweets.

World Environment Day: The Dept of Environmental Science organised a One Day National Seminar on "Ecosystem Restoration" on World Environment Day. The Horticulture Section of the University also celebrated World Environment Day on 5th June 2021 by planting 23 plant saplings of different species on various sites on the University campus.

7th International Day of Yoga: Tezpur University observed the 7th International Day of Yoga on 21st June 2021 by organizing activities such as a video blogging contest on the topic "My Life My Yoga" (Jeevan Yoga) from 12th to 20th June 2020.

75th Independence Day: Owing to the Covid-19 pandemic, the University celebrated the 75th Independence Day with caution on 15th August 2021. Prof. V. K. Jain, Vice-Chancellor of the University hoisted the National Tricolour in the KBR Auditorium.

Fit India Freedom Run: The Fit India Freedom Run 2.0 was organized on 29th August 2021 in front of the KBR Auditorium. A good number of TU fraternity members participated in a Freedom Run organized during the event.

Hindi fortnight: The University observed the Hindi fortnight through online mode from 14th to 28th September 2021. Various competitions were organized during the occasion.

National Education Day: Department of Education celebrated National Education Day on 11th November 2021 to commemorate the birth anniversary of the first Education minister of Independent India Abul Kalam Azad. The department organized an online talk to commemorate the event.

152nd Birth Anniversary of the Father of the Nation Mahatma Gandhi and the 117th Birth Anniversary of Lal Bahadur Shastri, Former Prime Minister of India: Tezpur University celebrated the Birth Anniversary of the Father of the Nation and the Birth Anniversary of the former Prime Minister of India on 2nd October 2021 in front of KBR auditorium.

National Unity Day: To mark the birth anniversary of Sardar Vallabhai Patel, Tezpur University in collaboration with NSS Cell, NCC & TUSC, Tezpur University observed National Unity Day on 31st October 2021. Several cultural competitions were organized in online mode to commemorate the event.

72nd Constitution Day: Under the aegis of Azadi Ka Amrit Mahotsav the 72nd Constitution Day was celebrated by Dr. Ambedkar Chair, Tezpur University on 26th November 2021. A preamble reading session, a drawing competition and a public lecture were organised during the day.

Vigilance Awareness Week 2021: The University organised Vigilance Awareness Week 2021 to uphold the spirit of vigilance among the students, faculty members and non-faculty staff of the University. All employees were requested to take the integrity pledge on is where is basis.

66th Mahaparinirvana Diwas of Bharat Ratna Babasaheb Ambedkar: The University observed 66th Mahaparinirvana Diwas remembering Dr. B. R. Ambedkar on his death anniversary on 6th December 2021. The 7th Dr. Ambedkar Memorial Lecture was organized during the day.

Foundation Day: Tezpur University celebrated its 29th Foundation Day on 21st January 2022. Prof. T. G. Sitharam, Director, IIT Guwahati graced the occasion as the chief Guest and delivered the Foundation Day oration. Prof. Pulickel Ajayan, Benjamin M. and Mary Greenwood, Professor of Engineering at Rice University, Houston, Texas, USA also joined the event as Guests of Honour and delivered a talk.

Convocation: The 19th Convocation of the University was solemnised on 26th February 2022 with 1249 students graduating as B.Techs, M.Techs, M.As, M.Scs and Ph.Ds. His Excellency, the President of India, Shri Ram Nath Kovind graced the ceremony as the Chief Guest and delivered the Convocation address. His Excellency, the Governor of Assam & Chancellor of the University, Professor Jagadish Mukhi and Hon'ble Chief Minister of Assam, Dr Himanta Biswa Sarma, were also present at the ceremony and addressed the awardees.

Republic Day: Owing to the Covid-19 crisis, the University celebrated the 73rd Republic Day with great caution. Prof. V. K. Jain, Vice-Chancellor of the University, hoisted the National Flag at the KBR auditorium of the University. A craft project and essay writing competition were organized to commemorate the event.

"InSCIgnis" organised on the occasion of National Science Day: Tezpur University celebrated inSCIgnis, one of the biggest Science Fests of North East India, on the occasion of "National Science Day". Several events were organised with much gusto from 27th February to 1st March 2022.

International Women's Day: Dept of Law, Dept of Mass Communication and Journalism and the Dept of Social Work observed International Women's Day on 8th March 2022. Several competitions and lectures were organised during the day.

24th Annual Meet: The 24th Annual Meet of the University was organised from 5th to 20th March 2022. Several cultural, literary and sports competitions were organised during the event where the students of the University participated wholeheartedly.

ANNUAL REPORT 2021-22

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Published by:

Registrar, Tezpur University

Acknowledgements

Most photographs that appear in this Annual Report were taken by the students of our University. Their contribution is gratefully acknowledged.

Printed at:

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> Printed at : TICOL STYLE TRACK, Kumargaon, Tezpur Published by The Registrar, Tezpur University