

List of Applied Patent Applications from Tezpur University			
Sl. No	Application No	Title of Invention	Inventor (s)
1	202531104114	Flexible hydrophobic 2D/2D heterostructure based biodegradable coating films with antimicrobial, heat resistant and shelf-life enhancing properties for advanced food-packaging application	Prof. Pritam Deb, Ms. Monika Sharma, Mr. Anil Kumar Singh, Ms. Manmayuri Kataki and Mr. Tushar Baruah
2	202531102166	Portable Smartphone-Integrated Sensing Device for On-Site Detection and Classification of Microplastic Types	Prof. Pritam Deb, Prof. Pabitra Nath, Mr. Kaushik Rajbonshi, Mr. Chunuranjan Dutta, Mr. Deepshekhar Roy and Mr. Biprav Chetry
3	202531100920	"High-performance vertical structure-based electrode material for rechargeable aluminium-ion battery operable in gel electrolyte"	Pritam Deb, Monika Sharma and Snehasish Deb
4	202531092754	FET-based Potentiometric Biosensor for Ultrasensitive Detection of Dopamine	Ms. Onishaa Saikia, Dr. Jiten Chandra Dutta and Ms. Dharitri Dutta
5	202531092819	Chitosan/MWCNT Nanocomposite-based Biosensor for Glutathione Detection	Ms. Diksha Kalita, Ms. Onishaa Saikia and Dr. Jiten Chandra Dutta
6	202531079835	Low-cost Transverse Rumble strip for Enhanced Vibratory Response in Vehicle Sprung mass	Subhankar Chakraborty, Santanu Sharma and Rupam Goswami
7	202531075795	Continuous kheer-making machine thereof	Tenishwori Akoijam, Nishant Rachayya Swami Hulle, Amit Baran Das
8	202531074557	ExoRehabGlove	Mr. Syed Saif Uddin Ahmed, Dr. Nayan M. Kakoty, Dr. Zahnupriya Kalita, Dr. Satyajit Borah, Dr. Kuki Bordoloi
9	202531070259	Optical Trace Moisture Measuring System	Md. Rahat Mahboob, Sayed Afzal Ali and Tarikul Islam
10	202531010140	A non-enzymatic electrochemical sensor for detection of creatinine	Kabyashree Hazarika and Jiten Chandra Dutta
11	202531003015	Dengue 2 virus infection detection kit based on paper capacitance using inclined comb electrode structure	Dr. Partha Pratim Sahu, Mr. Geethartha Sarma and Dr. Biswajyoti Borkakoti
12	202531000131	Biodegradable plates from areca nut husk and water hyacinth fibre	Bedanta Rajbongshi, Laxmikant Shivrath Badwaik, Akuleti Saikumar and Bidisha Karjee
13	202431103369	A nano-composite based electrochemical sensor for creatinine detection	Dr. Jiten Chandra Dutta and Ms. Kabyashree Hazarika
14	202431097193	Urine deodorizer spray for application in private and public urinal / restroom	Robin Kumar Dutta, Rituparna Saikia, Tushmita

			Das and Saranga Baishya
15	202431095009	Fabrication and Characterization of a Carbon Nanotube-based Enzyme Field Effect Transistor (CNT-ENFET) for the detection of Sarcosine	Jiten Chandra Dutta and Onishaa Saikia
16	202431081191	A vision-based photogrammetric measurement system for Litchi crop management automation	Dr. Bhabesh Deka and Mr. Debarun Chakraborty
17	202431078656	A Bistable Door Hinge-Control	Mr. Lalit Patidar, Ms. Anwesha Neog and Dr. Vivek Kumar Mehta
18	202431074442	Paper Electrochemical Sensor For Sodium And Potassium Ions Detection In Human Sweat Using Portable Microcontroller Based Potentiostat	Partha Pratim Sahu, Rimjim Shibam, Abhishek Kumar Rai and Dipangshu Konwar
19	202431067336	Priming Of Seeds With Quantum Material Ensemble	Pritam Deb, Karan Kumar Das and Sayoree Purakayastha
20	202431064005	TiO <sub>2</sub> -MWCNT-Chitosan nanocomposite based amperometric DNA biosensor for ultra sensitive detection of bacterial meningitis	Jiten Chandra Dutta, Nur Mehbub Alam and Onishaa Saikia
21	202431062957	Process For Enhancement Of Viscoelastic Behavior Of Gluten Free Flour	Soumya Ranjan Purohit and Sanstuti Prasad
22	202431062326	System For Measuring Moment Of Inertia Of The Rotor Of A Motor	Shantanu Sharma, Subhankar Chakraborty and Rupam Goswami
23	202431059617	Method And System To Obtain Multimodal Microscopic Imaging Viewable On Any Wi-Fi Enabled Display Panel	Pabitra Nath and Biprav Chetry
24	202431057140	A Low-Cost Single Lead ECG Acquisition System Using Paper-Based Silver (Ag) Electrodes for the Diagnosis of Cardiovascular Disease	Bidyut Bikash Borah, Geetartha Sarma, Soumik Roy, Dhruba K. Bhattacharyya and Bikash Rai Das
25	202431041124	See-Through Meta-Structure Absorber For Camouflaging Solar Panel	Nidhi S. Bhattacharyya and Sanghamitra Saikia
26	202431039000	Process For Conservation Of Cellulosic Handmade Paper Manuscripts And Machine-Made Paper Books	Robin Kumar Dutta, Rituparna Saikia, Priya Devi, Mousum Dutta
27	202431035281	Age Detection Of Rice Grains	Miran Jyoti Buragohain, Subhankar Chakraborty and Santanu Sharma
28	202431035472	Method And System To Obtain Enhanced Autofluorescence Signal From Microbial Species On A Portable Sensing Platform	Pabitra Nath, Biprav Chetry and Chunanranjan Dutta
29	202431015607	Pahi: Next-Gen Responsive Bionic Arm 1.0	Durlav Sonowal and Rajjul Hussain

30	202431012822	Traction Control Using Magnetorheological Dampers For Electric Vehicle	Subhankar Chakraborty, Shantanu Sharma and Pronita Boro
31	202431007408	Two-Dimensional Nanocomposite For Soil Health Enhancement	Pritam deb, Prarthana Puzari, Saransha Mohanty and Antara Deb
32	202431006877	Innovative Laboratory-Scale Prototype For Smoke-Drying And Fermenting Fish To Produce Napham, Tailored For Assam And The North- East Region Of India	Sankar Deka, Kapil Deb Nath and Nikhil C.
33	202431004627	Development Of Shelf Stable Passion Fruit Based-Beverage Enriched With Beta-Carotenoid	Charulata Mahanta and Hemanta Chutia
34	202431002828	Antimicrobial Conformal Coating for Perishable Food Preservation	Pritam Deb, Korobi Konwar and Gayatri Sarkar
35	202331088284	Snake Venom Detection Kit Using Planer Paper Substrate Capacitance	Partha Pratim Sahu, Geetarth Sarma, Upasana Puzari and Asis Mukherjee
36	202331086603	Capacitive Sensing For Quantifying And Debittering Of Naringin And Limonin In Citrus Limetta (Mosumbi) Juice	Partha Pratim Sahu and Satyajit Das
37	202331068011	IOMT based hospital network with openflow QOS support and fog/cloud offloading	Dr. Nabajyoti Medhi, Mr. Kumarjit Ray, Mr. Rajdeep Ghosh, Mr. Aditya Dey, Mr. Kunal Das, Mr. Pritindra Das, Mr. Vicky Kumar Deka, Mr. Tridib Lochan Dutta, Ms. Debangee Goswami, Mr. Prabhatangshu Phukan, Pratik Chanda, Birglang Bargayary and Arindom Aich
38	202331047578	Automated device for stem removal of King Chilli (Bhut Jolokia)	Abinash Thakur, Onishaa Saikia, Jiten Chandra Dutta and Satyajib Bhattacharya
39	202331046993	Low-cost biodegradable plate made from Eggshell	Sriram M. and Laxmikant S. Badwaik
40	202331046391	Paper based device for simultaneous sensing of multiple adulterants and contaminants in raw milk	Rajib Biswas, Upama Das, Nikhil Kumar Daimari, Pohar Borah and Ashamoni Neog
41	202331044106	A quick and efficient daylight photocatalyst	Pawan Chetri, Rituraj Mahanta and Gazi Ameen Ahmed
42	202331038151	A cost effective and smart e-commerce inventory management system using autonomous system of blind mobile robots	Barnali Chowdhury, Pradipta Barma
43	202331012154	Detection of egg albumin	Arindom Sharma, Subhankar Chakraborty and Santanu Sharma

44	202331007131	Black fungus detection kit based on inter-digital planer paper capacitance	Partha Pratim Sahu, Subham Verma, Satyajit Das, Bidhisha Saha, Sanjeev Karmakar and Pranobesh Chattopadhyay
45	202331006389	A prototype paper capacitive sensor for onsite rapid detection cysteine content in blood plasma	Partha Pratim Sahu and Biswadeep Roy
46	202331000063	Smart Portable Dheki	Nidhi S. Bhattacharya, Bidhan Ch. Das, Abhilash Gayan and Pranjit Kr. Baishya
47	202231069759	STAMP (Stacked Tray Modular Photobioreactor)	Dhanapati Deka and Doljit Borah
48	202231066854	Microwave selfhealable and melt reprocessable environmentally benign, organic solvent-free, and surfactant-free waterborne polyurethane/acrylic dispersions	Niranjan Karak and Samiran Morang
49	202231058974	Online biogas plant diagnostic, forecasting and management system	Priyam Kumar Das, Durlav Sonowal and Debendra Chandra Baruah
50	202231055755	A baking ingredient for fat and egg protein replacer in cake	Amit Baran Das, Manaswini Barik and Adarsh Maurya
51	202231043102	Process for immobilization of pectinase on chitin support using ultrasound	Nandan sit, Nipona Shill, Nurin Afzia, Bhaskar Jyoti Kalita
52	202231042538	Biodegradable heat shrinking film for cylinder gas cap and bottle lid sealing	Pritam Deb, Meenakshi Talukdar and Sudhansu Shekhar Sahoo
53	202231042165	Value-added cattle urine as liquid fertilizer	Robin Kumar Dutta and Rituparna Saikia
54	202231009453	Paper capacitive sensor based novel corona virus detection kit	Partha Pratim Sahu, Geetartha Sarma and Biswajit Kakoty
55	202031002271	Removal of arsenic from ground water by capsule technique.	Chiranjeev Bezbaruah, Parag Nath and Robin Kumar Dutta
56	202131060631	A smartphone based analytical system	Pabitra Nath, Diganta Rabha and Diganta Hatiboruah
57	202131055185	Remote controlled device for collection of oil from the oil spill on land	Pritam Deb, Monika Sharma and Nitumoni Konwar
58	202131054965	Device for sensing and collection of Oil spill on water bodies	Pritam Deb, Monika Sharma and Manas Pratim Chetry
59			Ankita Das, Bihung Muchahary, Aniket Raj,

	202131045925	IoT Based Portable Ventilator	Manish Kumar, Firdausa Ahmed, Chiranjit Adhikary and Soumik Roy
60	202131044011	An Oxygen generation equipment based on water splitting for chronic/acute respiratory syndrome patients	Partha Pratim Sahu and Jagat Das
61	202131041315	Development of multimodal optofluidic system for sensing heavy metal ions	Rajib Biswas, Pritam Deb, Nirmal Mazumder and Soumyabrata Banik
62	202131022730	An Emg Based Multi Grasp Prosthetic Hand with an Android Interface	Nayan M. Kakoti and Lakhyajit Gohain
63	202131020238	System for real-time onsite tracing of water content present in aircraft or jet fuel	Partha Pratim Sahu
64	202231030989	Methods and apparatus of multi-modal microscopic imaging on a smartphone and OLED display illumination	Pabitra Nath and Diganta Rabha
65	202031039202	Development of low fat baked snacks using de-oiled soya flour	Ayan Bhattacharjee, Devesh Kumar and Laxmikant S. Badwaik
66	202031016837	Protective face shield system with adaptability for bespectacled wearer for health care/medical purposes	Kishor Kumar Baruah
67	202031000071	An improved iron fortification technique for fortification of rice using cold plasma	Poonam Mishra and Kumudhini Akasapu
68	201931012050	A continuous jaggerymaking machine	Mr. Amit Baran and Das Himakshi Baishya
69	201931052903	Custom synthesized Neuritogenic Peptides and its uses thereof	Ashis Kumar Mukharjee, Taufikul Islam, Rupak Mukhopadhyay, Munmi Majumder
70	201931014698	Two dimensional heterostructure based composite films for food packaging	Pritam Deb and Meenakshi Talukdar
71	201931049269	An EMG based Prosthetic Hand Controller for Real Time Grasping realizing Neuromuscular Constraint	Nayan M. Kakoty, Lakhyajit Gohain
72	201911027455	Aptamers against phospholipase A2 in snake Venom and uses thereof	Tarun Kumar Sharma, Anjali Anand, Robin Doley
73	201931020788	Polymer/antibiotic coated Muga (Antheraea assamensis) silk suture	Arup Jyoti Choudhury, Gazi Ameen Ahmed, Namita Ojah
74	201931020800	An optical fiber prototype instrument for online monitoring of transformer oil insulation	P.P. Sahu
75	201831045155	System for enhancing stability of bicycle by steering-back handle bar automatically	Dilip Dutta, Sudipta Saikia, Zahnapriya Kalita and Arpeeta Saikia
76	201831045154	A saddle system for female bicycles adapted to counter forward slip of rider on saddle surface during sudden braking	Dilip Dutta, Arpeeta Saikia, Zahnapriya Kalita and Sudipta Saikia

77	201831009592	Designed 2d graphitic sheet for viscous oil removal using magnet	Pritam Deb and Meenakshi Talukdar
78	201831010002	Toxin-epitope based detection of species-specific snake envenomation	Asish Kumar Mukherjee and Sumita Dutta
79	201831009528	A portable optical fiber instrument for instant petrolpurity detection	Partha Pratim Sahu
80	201831009678	Integrated and automated setup for preparation and vending of panipuri	Saurav Jyoti Sarma, Abhijit Nath, PolasPratim Dutta and Chandeeep Suman Gogoi
81	201831038837	Toxins-targeted specific novel anti snake venom	Ashis Kumar Mukherjee, Aparup Patra, Sumita Dutta, Bhargab Kalita, AbhisheK Chanda
82	201831010001	Synthetic anticoagulantpeptides derived from <i>Najanaja</i> snake venom	Asish Kumar Mukherjee and Sumita Dutta
83	201831009091	A smokeless multifunctionaland multipot solid fuel stove	Biswajit Gogoi andDebendra Chandra Baruah
84	201731009379	Magnetic secondary nanostructure as contrastagent for magnetic resonance imaging	Pritam Deb andKoushik Saikia
85	201731000104	Selective para-hydroxylationof substituted aromatic hydrocarbons using H <sub>2</sub> O <sub>2</sub> catalyzed by waterborne hyperbranched polyurethane/ carbon quantum dot nanocomposites	Niranjan Karak,Vijay Kumar Das and Satyabrat Gogoi
86	201631022922	Smartphone based system for detection and measurement of chemical and biological species inliquids	Iftak Hussain, Syed Ibtisam Tauhidi,Kamal Uddin Ahamad PabitraNath
87	201631016888	A Two Way Ratchet	Arup Jyoti Chutia
88	201631005351	Casein Nanoparticles for Colon Targeted Controlled Delivery of Biologically Active Agents in Foods	Pallab Kumar Borah and Raj Kumar Duary
89	1313/KOL/2015	Anticoagulant actives and synergistic anticoagulant composition and method of producing the same	Ashish Kumar Mukherjee and Debananda Gogoi
90	1295/KOL/2014	Mesoporous secondary nanostructures as multifunctional heavy metal scavenger	Pritam Deb, Kakoli Bhattacharya and Devaborniny Parasar
91	522/KOL/2008	A Reduced Size Linearly Tapered 3dB (Half Power Splitter) Multimode Interference (MMI) Coupler	Partha Pratim Sahu