



# PEI CHRONICLES

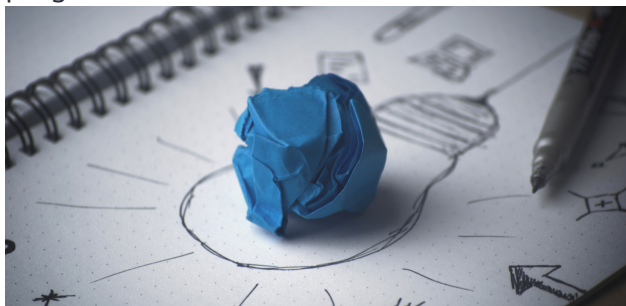
*Quarterly Newsletter of Power Electronics & Instrumentation Department  
JORHAT INSTITUTE OF SCIENCE AND TECHNOLOGY*

## VISION

To become a centre of excellence in the field of power electronics and instrumentation engineering to meet the need of industry and society.

## MISSION

- To provide a platform for students to develop core competency and professional skills.
- Periodic update of the curriculum to bridge the theory-practice gap and to keep abreast with the recent technical developments
- To provide an environment conducive for innovation, team work, and entrepreneurial leadership and to reshape the ethics and human values of budding engineers
- To encourage faculty members to upgrade their knowledge through continuing education programs...



## Newsletter Highlights

VISION AND MISSION

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MESSAGE FROM THE HOD

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ACTIVITIES

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STUDENT ACTIVITIES

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# ABOUT THE DEPARTMENT

Welcome to the Power Electronics & Instrumentation Engineering department established since the very inception of the institute in 2009. The department presently offers undergraduate course in Power Electronics & Instrumentation Engineering with an intake of 60 students. The syllabus cover the areas of Power Electronics, Instrumentation and Control system engineering and is updated with new Credit Based Assessment System following the guidelines of AICTE model syllabus. The department has well equipped laboratories in Instrumentation, Control system, Measurements, and Power Electronics devices to name a few. Above all the department boost of young, dynamic, and dedicated faculty and staff to serve the very cause. The department continuously strives to produce technically proficient and socially committed engineering professionals to meet the need of North-Eastern region and the world. The students of the department do internship at different organizations like OIL, ONGC, NRL, BSNL, IITs, and different research labs. The alumni of the department are absorbed in different organizations like OIL, NRL, APDCL, APGCL, AEGCL, Wipro, TCS, Honeywell Technologies, and in different Telecom sectors while others are pursuing higher studies in NITs, IITs, and even in foreign universities.

## MESSAGE FROM THE HOD

Warm greetings!!

It gives me immense pleasure to release the inaugural issue of the department Newsletter from the Power Electronics and Instrumentation Engineering department (PEI). The PEI department was established in the year 2009 at very inception of JIST. The department boost of well qualified young, dedicated, and energetic faculties. I feel honoured to be associated with the department almost for the last one decade.

The Newsletter reflects the academic and co-curricular activities and achievements of the faculty, staff and students of the department. During the pandemic the department has conducted online classes, assessments, conducted online viva-voce, and project evaluations. The department also conducted online internships for students on Artificial Intelligence and Machine Learning during the pandemic. The department offered an elective course in Artificial Intelligence and Machine Learning for the first time to equip students with future skills.



**DR TAPAN DAS**

The newsletter will give us a wonderful opportunity to introspect our contributions and achievements as a department in the year gone by. I believe it will infuse a healthy environment amongst us and help in bringing the best out of ourselves.

I wish the entire editorial team and all the stack holders of the department good luck and best wishes for this endeavour and forthcoming issues of the Newsletter.



# Departmental Activities

- A Simulation Lab equipped with PSIM, LabVIEW and MATLAB simulation software was developed under TEQIP-3.
- An online student training program was conducted on “Future Skill Technologies: Artificial Intelligence and machine Learning” under TEQIP-3, from 05th-31st August, 2021.
- Major Project viva for the outgoing batch of 2021 was held on 6th August, 2021, through online mode.
- A departmental meeting was held on 25th August, 2021 regarding course distribution and routine allotment for the odd semesters.
- Offline and Online classes for the 3rd, 5th and 7th semesters stated on 6th September 2021.
- CIE-1 for the 3rd, 5th and 7th semesters were held from 6th-8th October 2021 respectively.
- A departmental meeting was held on 9th September, 2021 regarding project guide allotment for the final year projects.
- An online departmental induction program was conducted for 1st-year students on 25th October, 2021.
- CIE - 2 for the 3rd, 5th and 7th semesters were held on 16th, 17th and 18th November 2021 respectively.
- Offline classes for all non-final semesters resumed on 22nd December 2021.

## FACULTY ACTIVITIES

### DR TAPAN DAS

- Dr. Tapan Das became the Co-Principal Investigator of a Sponsored project entitled “Design and development of mitigation tool for solar photovoltaic (PV) module through investigation on impact of dust in different atmospheric locations of Assam” under TEQIP-3.
- A paper entitled “Motor Imagery Based Fuzzy Logic Controlled Intelligent Wheelchair” authored by Tapan Das, Priyanka Nath published in International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), IEEE, 7-8 October 2021, Mauritius.
- Dr. Tapan Das became the Editorial Board Member of the American Journal of Optics and Photonics.
- Dr. Tapan Das received the “InSc Research Excellence Award” 2020 from the Institute of Scholars, India in March 2021.
- An invited talk by Dr. Tapan Das was broadcasted by All India Radio, Guwahati on the occasion of “National Technology Day” on 11th May 2021.
- Dr. Tapan Das was the Supervisor of the APSC- Combined Competitive (Preliminary) Examination 2020 conducted on September 2021.
- Dr. Tapan Das, became a member of Performance Monitoring Committee (Convenor) for Engineering Stream on October 2021.
- Dr. Tapan Das took the charge of Coordinator, Examination Cell (Engineering Stream) on November 2021.
- Dr. Tapan Das, TPO gave a talk on Career Counselling in the Induction Program on 8th November 2021.
- Dr. Tapan Das, became a member of IQAC Cell on December 2021.
- Dr. Tapan Das attended a one day Workshop on Aligning Engineering & Polytechnic Education in the line of National Education Policy, NEP 2020: creating road map for the state of Assam” organized by AICTE on 12th November, 2021.
- Dr. Tapan Das was invited as special guest by Arunodoi Cultural Club, Sikarhati, Kamrup on the occasion of Golden Jubilee Celebration on 30th December 2021

## **SRI GAUTAM TALUKDAR**

- Attended a STC course on “Recent Advances in RF and Photonics” under TEQIP-3 at IIT Guwahati from 22nd to 26th February, 2021.
- Attended a STC QIP programme on “ Brain Mapping and Artificial Intelligence” under QIP held from 11th to 20th March, 2021 at IIT Delhi.
- Became the Assistant Officer in Charge of BE 7th Semester Regular Examination, 2021.
- Attended a webinar series on “Recent Advancements in RF & Microwave Circuits and Devices” organized by BENNETT University, ECE Department in association with NUMEREGION during 05th to 09th April, 2021.
- Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "ARTIFICIAL INTELLIGENCE IN CONTEMPORARY BIOMEDICAL & HEALTHCARE APPLICATIONS: FUNDAMENTALS & HANDS ON MATLAB" from 21st to 25th June , 2021, at Gautam Buddha University, Greater Noida, U.P.
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on " Microgrid An Opportunity: Electric Vehicles and Renewable Energy Resources" from 5th to 9th July, 2021, at Dayalbagh Educational Institute, Agra.
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on “Bio-Medical Signal Processing for Smarter Mobile Healthcare” from 19th to 23rd July, 2021, at GIET University.
- Became the Jury Member in the “Green Cover Competition” on the occasion of “Teacher’s Day” organized by IEEE Student Branch, Central University of Haryana, Mahendragarh, on 5th September, 2021.
- Became the Centre Superintendent of PAT, 2021 held at Jorhat Institute of Science and Technology on 22nd August, 2021.
- Became the Verifying officer of CEE Counselling, 2021.
- Attended a one day Workshop on Aligning Engineering & Polytechnic Education in the line of National Education Policy, NEP 2020: creating road map for the state of Assam” organized by AICTE on 12th November, 2021.

## **MRS. JUMPI DUTTA**

- A paper entitled “Music Emotion Recognition in Assamese Songs using MFCC Features and MLP Classifier” authored by Mrs. Jumpi Dutta in the IEEE International Conference for Intelligent Technologies, (CONIT 2021), Hubballi, Karnataka, India, during June 25-27, 2021.
- Presented a paper entitled “Feature Extraction and Analysis for Emotion Recognition in Songs using PRAAT Software” in the 2nd IEEE IAS International Conference on Computational Performance Evaluation 2021 (ComPE-2021), North-Eastern Hill University, Shillong, Meghalaya, India, during December 1-3, 2021.
- Attended one week online FDP (AICTE Training and Learning Academy) on "ROAD-Response Effectiveness, Organising Self, Attitudinal Shift & Decision Making" organized by Gauhati University from 22nd to 26th November, 2021.
- Attended one week online FDP (AICTE Training and Learning Academy) on "Recent Trends and Advancements in ANN and Deep Learning for Real Time Applications" organized by Rungta College of Engineering and Technology, Bhilai from 20th to 24th December, 2021.
- Attended one day workshop on "Aligning Engineering & Polytechnic Education in the line of National Education Policy, NEP 2020: Creating a road map for the state of Assam" organized by AICTE on 12th November, 2021.
- Attended AICTE-ISTE Induction Program on "Outcome Based Pedagogy Principles for teaching-Learning in Engineering education" organized by Nowgong Polytechnic College from 22nd to 27th February, 2021.

## MR. ANSHUMAN GOSWAMI

- Became the Verifying officer of CEE Counselling, 2021.
- Attended One day workshop on "Aligning Engineering & Polytechnic Education in the line of National Education Policy, NEP 2020:Creating a road map for the state of Assam" organized by AICTE on 12th November, 2021.
- Took charge as Faculty in charge for Major Games Office of JIST.
- Driven by the passion for healthy living and lifestyle transformation helped people to become healthy, get rid of obesity and relieved many from the stubborn lifestyle related diseases and problems only through proper nutrition.
- Participated and got selected in an International event in the top 50 athletes in Men's Physique Division in Sheru Classic and Amateur Olympia India held between 3rd-5th December,2021 in Mumbai.

## MRS. CHANDANA DEV

- A paper entitled "Assamese VADER: A sentiment analysis approach using modified VADER," authored by C.Dev, A. Ganguly and H. Borkakoty published in International Conference on Intelligent Technologies (CONIT),2021, pp.1-5.

## MR. PANKAJ BORAH

Executed the following Sponsored Project as the Principal Investigator:

- "Performance analysis of Solar Panel with automated cleaning system" under TEQIP-3.
- "Design and development of mitigation tool for solar photovoltaic (PV) module through investigation on impact of dust in different atmospheric locations of Assam under TEQIP-3.

## GOLAM IMRAN HUSSAIN

- Participated in Online Faculty Training on "Artificial Intelligence and Machine Learning" organized by IIT Kanpur (under TEQIP-3) from 14th -24th June, 2021.
- Participated in International Conference on Sustainable Approaches in Food Engineering and Technology (SAFETY), organized by the Department of Food Engineering Technology, Tezpur University, Assam India, and Department of Food Science and Technology, University of Georgia (US) in Association with AFSI(I) Tezpur Chapter, held on 25th June , 2021.
- Presented a paper entitled " Opportunities and Challenges of Electric Vehicles in India" in the Two-Day National Conference on Emerging Trends in Engineering and Research (NCETER-2021), organized by Department of Electrical Engineering in Collaboration with IQAC JIS College of Engineering, Kalyani, West Bengal, India held during 29th - 30th June, 2021
- A paper entitled "Determining the Influencing Factors of COVID 19 on Mental Health Using Neural Network" authored by Menonjyoti Kalita and Golam Imran Hussain publishes in the International Research Journal on Advanced Science Hub on 20th August, 2021.
- Became the Resource person of a Sponsored Student Training program on " Future Skill Technologies : Artificial Intelligence and machine Learning " through online mode TEQIP-3 , held from 05th-31st August, 2021.
- Became the Co-Principal Investigator of a Sponsored project entitled "Performance analysis of Solar Panel with automated cleaning system" under TEQIP-3.
- Attended a one day Workshop on Aligning Engineering & Polytechnic Education in the line of National Education Policy, NEP 2020: Creating road map for the state of Assam" organized by AICTE on 12th November, 2021.

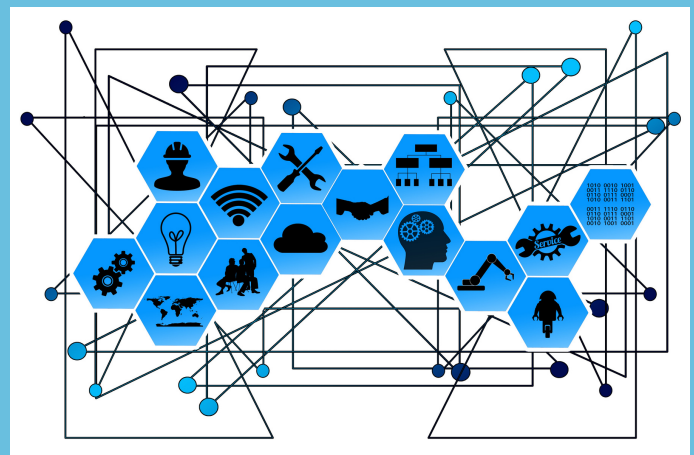
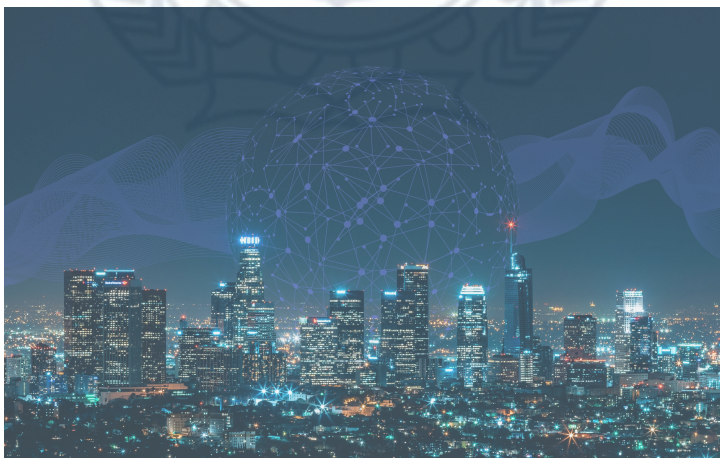


# Student Activities

- Pritam Kashyap Borah got placed in Extra Marks Education Pvt. Ltd., Edu-Tech company, with a package of 4.2 lacs.
- Priyanka Nath has been awarded for Online Quizophile 2020 competition organized by EGSpillay group of institutions-Nagapattinam.
- Priyanka Nath have undergone 12 weeks Industrial training in Agritech and Aerospace at Xiphias Industries under MSME.
- Debodutta Nath Chaudhury, Mayuri Basumatai, Pompy Das, Tajmin Nahar Ahmed have undergone 4weeks Industrial training on Python programming conducted by National Institute of Electronic and Information Technology, Gorakhpur.
- Himangshu Rajkhowa, Mohan Jyoti Baruah, Omkar Nayak have undergone 15 days internship in BSNL, Jorhat.
- Izaz Barbhuiya have undergone 60 hours online internship in Artificial Intelligence and Machine Learning under the guidance of Mr. Goalm Imran Hussain, Assistant Professor, PEI, JIST
- Pradyut Jyoti Gogoi, Sinmoy Gogoi, Suraj Gogoi, Ananya Saikia, Sanjukta Das have undergone 15 days internship in Assam Petrochemical Limited-APL, Namrup.
- Kantha jyoti Sharma have undergone 6 weeks online internship in Programming with Python at Internshala trainings.
- Achinta Konwar and Abhishek Sharma have undergone training in Android app development at Internshala trainings

## ALUMNI SECTION

- Debajani Kaman and Anurag Gogoi got placed in Tata Consultancy Services as Assistant System Engineer.
- Khiyanat Deori got placed in Sultan Hospital And Research Centre as Assistant General Manager .
- Gulanchsmitta Gayatri Crounchadwip is currently working at Genus Power Infrastructure as GET- Apprentice.
- Krishnakhee Sensua has joined NSQF, SSA as a Vocational Trainer.
- Mridul Kumar Narzary is pursuing M.Tech in the department of Green Energy Technology from Central Institute of Technology, Kokrajhar, Assam.
- Alakesh Sarmah is pursuing M. Tech in the department of ECE from Chandigarh University .
- Swarup Nandan Gogoi is pursuing MBA from Dibrugarh University ,Centre For Management Studies.





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