## NATIONAL SEMINAR

#### ON

## RECENT TRENDS IN ENGINEERING & TECHNOLOGY (NSRTET 2024)

26<sup>th</sup> June - 28<sup>th</sup> June, 2024



## Jointly Organized by

# Department of Electronics & Communication Engineering

and

## Department of Applied Electronics & Instrumentation Engineering

In association with Internal Quality Assurance Cell (IQAC)



### Bankura Unnayani Institute of Engineering (Approved by AICTE & Affiliated to MAKAUT)

P.O: Bhagabandh, Dist: Bankura, West Bengal – 722146, India

### **ABOUT THE SEMINAR**

Bankura Unnayani Institute of Engineering embraces human diversity and is committed to enhance the technical knowledge and empowerment of skill to all research and related educational programs towards the development of the society. The principal objective of this seminar is to train, educate and appraise students, research scholars and professionals from academic institutes, industries and other sectors in the field of

- Renewable energy.
- Control and automation.
- Antenna array techniques.
- Smart grid system.
- Radial distribution system.
- Smart agriculture system.
- Optimization techniques.
- Power quality enhancement.
- Cognitive Radio Network.

#### **TOPICS OF INTEREST**

- Al Assisted Radial Distribution System Optimization Considering Renewable Distributed Generation and Electric Vehicle Charging Stations - Dr. Vivekananda Mukherjee, Associate Professor, Electrical Engineering, Indian Institute of Technology (Indian School of Mines), Dhanbad.
- Time-modulated array antennas theory, techniques, and design using Machine Learning Algorithms - Dr. Durbadal Mandal, Associate Professor, National Institute of Technology, Durgapur.
- Load Frequency Control of Isolated Power System using Evolutionary Algorithms - **Dr. Santigopal Pain**, Controller of Examination, Central University of South Bihar, Gaya.
- Relay based Cooperative Communication in Cognitive Radio Network – Dr. Chanchal Kumar De, Professor and Head of the Department, Electronics & Communication Engineering, Haldia Institute of Technology, Haldia.
- Load Frequency control in Smart Grid System - Dr. Mrinal Ranjan, Asst. Prof. and Head of the Department, Electrical & Electronics Engineering department, Gaya College of Engineering, Gaya.
- Smart Agriculture in India and the role of Agrovoltaics – Dr. Kamalika Tiwari, Asst. Prof., Electrical Engineering, Dr. B. C. Roy Engineering College, Durgapur.
- Power Quality Enhancement using Meta-Heuristic based UPQC & UPFC in Grid connected Hybrid Renewable Energy System – Prof. Ashish Ranjan, Asst. Prof. and Head of the Department, Electrical & Electronics Engineering, Nalanda College of Engineering, Chandi, Nalanda.

## BANKURA UNNAYANI INSTITUTE OF ENGINEERING

Bankura Unnayani Institute of Engineering (BUIE) is one of the premier Institutes in Eastern India affiliated to Maulana Abul Kalam Azad University of Technology (MAKAUT) and approved by AICTE. We are conducting B. Tech Degree Courses in disciplines Electronics seven (i.e. Communication Engineering, Applied Electronics & Instrumentation Engineering, Computer Science & Engineering, Information Technology, Electrical Engineering, Mechanical Engineering, and Civil Engineering) and M. Tech courses in two disciplines (i.e. VLSI and Microelectronics, and Computer Science & Engineering). BUIE celebrates 25 years of very successful and rewarding existence in providing quality education in technical disciplines and the institute has made its presence felt in the state & in the country. Bankura Unnayani Institute of Engineering is about 5 kms. away from Bankura railway station. The Institute has a sprawling and picturesque campus.

## THE ORGANIZING DEPARTMENTS

The department of Electronics and Communication Engineering of BUIE was established since the very inception of the college. During its journey of about twenty six years, the department has developed itself and at present runs about 15 laboratories of standard for undergraduate and postgraduate activities. The ECE department of BUIE offers excellent opportunities for students to study and perform state-of-the-art research and project works... The faculty of ECE department consists of well qualified and experienced teachers with noteworthy research background. The department offers B.Tech program in Electronics and Communication Engineering and M.Tech program in VLSI and Microelectronics. Undergraduates take Industry Oriented Mini Project at the end of third year of the four year program. Further, the students shall pursue one semester of faculty-supervised independent study, working either on a project of their own choice or on a faculty-sponsored research project. The innovative nature of the project challenges the students' intellectual bent of mind. The future of this branch is filled with limitless opportunities in industry, research and education. BUIE offers excellent opportunities for students to study and perform state-of-the-art research and project works. These are the stepping stones for superb employment opportunities. Students passed out from this Institute are working in leading Companies like TCS, WIPRO, IBM, L&T.

Applied Electronics and Instrumentation Engineering department was established in the year 1998 along with this reputed institute as well and was enormously successful to draw the attention of the students as well as the industry which makes this department as one of the most reputed and successful venture for Instrumentation Engineering not only in West Bengal but also in the eastern India. Plenty of highly qualified faculty members along with some renowned professors and experts from the core industry are associated with this department, which is also well equipped with various laboratories like Process Control, Industrial Instrumentation, Microprocessor and Microcontroller, Control System, Electrical & Electronic Measurement, Sensors & Transducers, Telemetry Lab etc.. The academic curriculum has been designed in such a way that the students can get the chance to work in the core industry as well as in IT industry and that is why it becomes unique and gets excellence when we proudly find out our students performing well starting from Govt. PSUs, Private core sectors like Honeywell, ABB, Yokogawa, HPL, Reliance Power & petrochemicals, Tata Metaliks, Reshmi metaliks Ltd., Jai Balaji etc., in IT industries like TCS, WIPRO, Cognizant, Accenture, Infosys, Tech Mahindra etc., and also in academics where they are doing well in various IITs, NITs, IISC, IIITs state government institutes as well as in various renowned private institutes to prove their ability not only in India but also in abroad. This Department is till now successful to maintain a good academic environment where we nurture our students to groom to bloom to the fullest as per their ability and that is why our past students till fell free to be in touch with the department, with the teachers, personally or via alumni, to make this department as a grand success.

#### Patron

Mr. Sasanka Dutta Chairman (BOG), BUIE

#### **Advisory committee**

Prof. (Dr.) Krishnendu Adhvaryu (Principal, BUIE) Prof. Aloke Roy (Dean of Academics, BUIE) Mr. Ramananda Mukherjee (Registrar, BUIE) Prof. (Dr.) Prativa Ranjan De (Dean of Student Affairs, BUIE)

#### Convener

Dr. Mrinmoy Sarkar (HOD, ECE) Email: mdeepmoy@gmail.com Mob:+91-7001837615

#### **Joint Convener**

Prof. Santanu Mallick (HOD, AEIE) Email: santanu.mallick@gmail.com Mob: +91-9434385218

#### **Members**

Prof. J. P. S. Thakur (Department of AEIE) Prof. Animesh Saha (Department of ECE) Prof. Tanusree Patra (Department of ECE) Prof. Amrelita Dasgupta (Department of AEIE) Prof. Subhashis Das (Department of ECE) Prof. Prof. Mahua Mallick (Department of ECE) Prof. Sanjib Kumar Kundu (Department of AEIE) Prof. Amit Mukhopadhyay (Department of ECE) Prof. Dwip Narayan Mukherjee (Department of ECE) Prof. Mirja Md. Habib (Department of ECE) Prof. Sukanta Biswas (Department of ECE) Mr. Hirak Kumar Kundu (Department of ECE) Mr. Soumitra Panja (Department of ECE) Mrs. Sima Rani Manna Maiti (Department of AEIE) Mr. Debashis Mandal (Department of ECE) Mr. Somen Debghoria (Department of AEIE) Mrs. Anwesha Sinha (Department of ECE) Mrs. Joyeshree Mitra (Department of ECE)

## CALL FOR PARTICIPATION

Faculty members of engineering / research institutions or Industry persons, students are cordially invited to participate in this program.

## **IMPORTANT DATES**

Last date of registration: 24th June, 2024 Seminar Date: 26<sup>th</sup> June - 28<sup>th</sup> June, 2024 Time: 11:00 AM Venue: Seminar Hall, BUIE.

#### **ACCOMMODATION & TRAVELLING ALLOWANCES**

No accommodation & travelling allowance will be provided to the participants.

#### **REGISTRATION FEES**

Delegates from Academia : ₹500/-Delegates from Industry : ₹500/-Research scholars and students : ₹100/-

The delegates willing to participate in this seminar are requested to send a scanned copy of the duly filled registration form along with the details (downloadable from payment www.buie.ac.in) on or before 24<sup>th</sup> June, 2024. Photocopies of the registration form can be used if necessary.

#### **Payment Details:**

Beneficiary Name: Bankura Unnayani Institute of Engineering Account No.: 426020100100002 Account Type: Current Deposit IFSC: BKID0004260 Bank of India, Bankura.



UPI ID: boism-9474642082@boi

## **ABOUT BANKURA**

Bankura, with its heart and soul in its culturally rich rural landscape, offers the tourists and visitors a breath of fresh air. The district takes immense pride in its art and temple architecture, lush green forests, and beautiful scenic hills. It lies in the Rarh region of West Bengal and is internationally well-known for the Bankura Horse - a terracotta crafted horse, and for Dashabatar Tash the historic paintings. BUIE is situated right on NH 314 which connects the Bankura district and ends at Purulia. BUIE is about 5 kms. away from Bankura railway station, 5 Kms from Bankura bus stand, and 51 Kms from Durgapur railway station.



#### **REGISTRATION FORM** (Please fill in all details in BLOCK letters) NATIONAL SEMINAR ON **RECENT TRENDS IN ENGINEERING & TECHNOLOGY** (NSRTET 2024) 26<sup>th</sup> June – 28<sup>th</sup> June, 2024

Name of the Participant:

Jointly Organized by Department of ECE & AEIE In association with Internal Quality Assurance Cell (IQAC) Bankura Unnayani Institute of Engineering

Designation:
Name of the Institute:
Address:
Mob: E-mail:
Payment amount:
Payment Mode: NEFT / UPI
Payment Reference ID:
Payment Date:
Signature of the Participant:
· <u></u>
Date:

Signature and Seal of the Head of the Institution:

Completed Applications may be sent by E-mail to the following at the Institute's address:

Mr. Debashis Mandal Email: nsrtet2024@buie.ac.in Mob: +91-8159071100

Mr. Somen Debghoria Email: nsrtet2024@buie.ac.in Mob: + 91-9434653299

Please note, participants are also requested to fill up the Google form https://forms.gle/vtr8ph1W1cj1kEfm9 (also available in college website www.buie.ac.in) for confirming their seat.