ABOUT THE INSTITUTE

BIT, Sindri was started as College of Mechanical and Electrical Engineering in 1949. The institute grew and flourished rapidly during the early days under the dynamic leadership of Prof. D. L. Deshpande, Director, who is regarded as the architect of the institute. The institute is located at a distance of 28 kms from Dhanbad railway station linked by rail as well as road. It has a sprawling campus of about 450 acres of land near the eastern bank of river Damodar. The institute is fully residential for students as well as teaching and non-teaching staff. The institute is administratively controlled by department of Science and Technology, Government of Jharkhand and academically it is affiliated to Jharkhand University of Technology, Ranchi for conducting examinations and awarding degrees. All courses are approved by AICTE and most of the undergraduate programs are accredited by the NBA.

The main aim of the institute is to provide valuable human resources for the industry and society through excellence in technical education and research for sustainable development. The college offers B.Tech. courses in 10 disciplines of engineering namely Mechanical, Electrical, Metallurgy, Production & Industrial, Chemical, Electronics & Communications, Civil, Mining, Computer Science, and Information Technology besides ten M.Tech. specializations and Doctorate. The college possesses modern amenities which include multimedia auditoriums, seminar rooms, class rooms, and a state of-the art well-stocked rich E- library, well-equipped modern laboratories and campus wide network & State of Art Siemens lab which is regarded as Centre of Excellence to meet the industry 4.0 demand.

ABOUT THE DEPARTMENT

The Department of Electrical Engineering was started in the year 1949 when the institute was born. The department offers four years B.Tech. Degree course with an annual intake of hundred students. Postgraduate program is also offered leading to M.Tech. degree with specialization in Control System and Power System and Doctorate program. The department is also looking after an electrical sub-station and is maintaining distribution line of BIT campus. The department has well equipped laboratories required for Undergraduate, Postgraduate and Doctorate programs. The important laboratories include: Power System Lab, Computer Lab, Control System Lab, Microprocessor Lab, Electrical Machines Lab, Instrumentation Lab, Circuit Lab, High Voltage Lab and Electrical Workshop. The prestigious million volt Atkinson High Tension Laboratory of the department is considered as first of its kind in India in the yesteryears.

VISION OF THE DEPARTMENT

To emerge as a globally recognized centre in the field of Electrical Engineering to provide valuable human resource and ambience for innovative research for sustainable development of industry and society.

MISSION OF THE DEPARTMENT

- To offer state-of-the-art undergraduate, post graduate and doctorate programmes by providing a conducive environment towards outcome-based teaching learning process with knowledge and skill creation, suitable for contemporary and future needs of industry.
- To promote creative ambience in order to generate new knowledge by conducting quality research in collaboration with Electrical, Electronics and allied industries.
- To bridge the gap between industry and academia by framing curriculum and syllabi based on industrial and societal needs so that competency of the students matches the upcoming challenges in education, profession and life.
- To instill moral and ethical values among the students through holistic personality development so as to ensure human intellectual capacity to its full potential.

ONE WEEK WORKSHOP

On

Active Distribution Networks: Challenges & Solutions

(Virtual Mode)

11TH -15TH JULY, 2022

Organized by

Department of Electrical Engineering

BIT Sindri, Dhanbad

Jharkhand-828123 (INDIA)

www.bitsindri.ac.in

SCOPE OF THE WORKSHOP

The conventional electric power distribution networks accepts bulk power from transmission system and are designed to work as loads. With the penetration of Distributed Generation (DG) technologies like Solar PV, Wind, Biomass etc., the distribution networks are no longer passive. Further, the integration of battery energy storage systems (BEES) and plugin electric vehicles (PEVs) not only posed challenges but also gave rise to opportunities to manage, control and enhance the performance of the distribution network.

In this context the proposed workshop throws light on the challenges and solutions to researchers and utilities in operating the distribution network optimally. With eminent expert speakers from academia and industry, the workshop is expected to facilitate the participants in exploring new avenues of research pertaining to Active Distribution Networks with high penetration of DGs, PEVs and BEES.

OBJECTIVES OF THE WORKSHOP

- To identify the thrust research and innovation in the smart distribution systems energy management.
- Impart the concepts of optimization for efficient operation of active distribution networks.
- To share various state-of-art schemes for charging electric vehicles with solar power.
- Distribution system power loss reduction by optimal accommodation of BEES.
- Provide insights into the role of DSO in planning and coordinating resources of the distribution system
- Familiarize the participants with various tools like **GAMS** and **ETAP** for modelling distribution networks and DG technologies.

PROPOSED RESOURCE PERSONS

- Prof. Debapriya Das, IIT Kharagpur
- Prof. V. Mukherjee, IIT (ISM) Dhanbad
- Dr. Nishant Kumar, IIT Jodhpur
- Dr. S. Bhaskar Karanki, IIT Bhubaneswar
- Dr. R .P. Gupta, MIT Muzaffarpur
- Dr. Hari Mohan Dubey, BIT Sindri
- Dr. Nirmala Soren, BIT Sindri
- Mr. Ashutosh Pandey, Dpty. Manager (NRLDC), POSOCO
- Dr.V.V.S.N Murty, Manager (Electrical), Engineers India Ltd.
- Experts from ETAP

WHO CAN ATTEND

The faculty members of the AICTE approved institutions, research scholars, PG Scholars, Participants from Government, Industry (Bureaucrats/ Technicians/ Participants from Industry etc.) and staff of host institutions.

REGISTRATION

- **No registration fee**
- Registration Link: https://forms.gle/FJomPUL6qcdHQoPG9
- The selection of the participants will be based on first come first serve basis

CERTIFICATION

E-certificates will be provided to those participants who have attended the program with minimum 80% attendance.

ORGANIZING COMMITTEE

- **Patron**

  Dr. D. K. Singh, Director
- **Convener**

  Dr. Md. Abul Kalam, HOD, EE Dept.

  Dr. Upendra Prasad, Prof., EE Dept.
- **Advisory Committee**

  Dr. Pankaj Rai, Prof., EE Dept.

  Dr. D. K. Tanti, Prof., EE Dept.

  Dr. H.M. Dubey, Assoc. Prof., EE Dept.

  Dr. Vineet Shekher, Assoc. Prof., EE Dept.

  Dr. R. Murmu, Asst. Prof., EE Dept.

  Mr. Shashi Minz, Asst. Prof., EE Dept.
- **Coordinators**

  Dr. Nirmala Soren, Assoc. Prof., EE Dept.

  Mr. Mukhlesur Rahman, Asst. Prof.,EE Dept.

  Mr. Mani Sankar, Asst. Prof., EE Dept.

CONTACT PERSONS

- **Mr. Mukhlesur Rahman**
  Assistant Professor,
  Dept. of Electrical Engg, BIT Sindri
  Mob: +91 8789484415
  Email: mrahman.ee@bitsindri.ac.in

- **Mr. Matta Mani Sankar**
  Assistant Professor,
  Dept. of Electrical Engg, BIT Sindri
  Mob: +91 9298200592
  Email: matta.ee@bitsindri.ac.in