# **BHAGWAN PARSHURAM INSTITUTE OF TECHNOLOGY**

## **Electrical and Electronics Engineering Department**

**Newsletter - October 2021 EEE EXPRESS** 

"If you want to find the secrets of the universe, think in terms of energy, frequency and vibration."

~ Nikola Tesla

## **Department's Vision**

To emerge as a centre of excellence producing globally competent and morally sound professionals in the field of Electrical & Electronics who will practice commitment to their profession and dedicate themselves to the service of mankind

## **Department's Mission**

- To develop state-of-the-art laboratories providing relevant practical inputs to students.
- To provide strong knowledge base to students in the area of Electrical & Electronics and to train them as per requirement of industries and research organizations.
- To facilitate institute industry interaction to the benefit of stake holders and to motivate teachers for continuous improvement of their academic standards.

## PILLARS OF BPIT

## **Chief Patron**

Shri Atam Prakash Kaushik(Chairman)

### **Patrons**

Padma Shri, Shri Surender Sharma (Vice-President) Shri Vinod Vats (General Secretary) Shri Ram Babu Sharma (Secretary) Shri Jagdish Prasad Sharma {Treasurer} Prof. Payal Pahwa (Principal, BPIT)

## **Editors**:

Mr. Puneet Dixit Ms. Ruchika

## **Student Editors:**

Kinshuk Yukti

## **DEPARTMENT & ITS RESOURCES**

### DEPARTMENT

- Electricity is very essential for every part of the society. Growth of any country depends on electrical & electronics system.
- The department of Electrical & Electronics engineering started since the inception of BPIT and offers B.Tech (Electrical & Electronics Engg.) program with annual intake of 60 students.
  To ensure the quality education department has a team of well qualified, experienced and dedicated faculty & staff members.
- The department is accredited by National Board of accreditation (NBA).

#### **RESOURCES**

All of our laboratories are well equipped to meet the requirements of university curriculum. These are listed

- Electrical Machines I & II Lab
   Electrical Technology Lab
   Power Electronics Lab

- 4. Scientific Computing Lab, Neuro Fuzzy Lab
  5. Circuit and System Lab, Power system I & II Lab
  6. Control System Lab, Sensors & Transducers Lab
  7. Electric Drives Lab, EEMI Lab

Mr. A.K. Tandon, founder director of the college, shares his expertise, experience and knowledge of all his years in an hour session once every week with the students in order to further enhance their knowledge about our department.



Ministry of Human Resources and Development, Government of India





#### **INFO-BIT**

Info-bit is a glance of webinars, success messages and workshops depicting students' all long-achievements.

#### HIGHLIGHTS OF THE DEPARTMENT

For the academic and professional development of students and faculty, the department of electrical and electronics engineering organizes an array of guest lectures and webinars. These are as follows:

 Electrical and Electronics Engineering deptt with Institution's Innovation Council (IIC) organized National Webinar on June 3, 2021. Topic of webinar was 'Innovation and IPR Practices' delivered by expert Prof. Ramesh Chandra Panda, who is the Dean, R&D cell, Synergy Institute of Engineering and Technology, Odisha. Participates learned to protect innovations by IPR.





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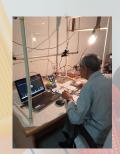
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- Electrical mobility is overtaking traditional automobiles at a rapid rate. To educate
  faculty members and students about this emerging vehicular technology, the EEE
  department organized a lecture by industrial expert Mr. Ankit Tayal on July 21,
  2021. The expert is the founder of M/s Pochochi and specializes in electric car and
  smart city training.
- Discussion about Career Opportunities in Japan for Students- On 13-March-21, the EEE Department hosted a symposium on the subject "innovation, higher education, and employment prospects for Indian engineering students in Japan." The objective was to attract the Japanese companies in India, and to make aware our students about research & technological advancement going on in Japan. In this context, the members of Sakuraa Nihongo Resource Centre (SNRC) interacted with the students.

- Prof A.K Tandon conducted a special session on activity-based learning, illustrating electrical principles. The event took place online between 9 March and 21 March. Prof. Tandon demonstrated new models based on electrical technology.
- The Department of Electrical and Electronics Engineering (EEE), Bhagwan Parshuram Institute of Technology Delhi, successfully organized a National Webinar on the topic 'Strengths and Bottlenecks of Solar PV Technology' on the online platform Google Meet on 08th August 2020. The webinar was sponsored by IEEE PES IAS Delhi Chapter and supported by IIC-MHRD. Dr. Shelly Vadhera, Associate Professor, Department of Electrical Engineering, National Institute of Technology, Kurukshetra, India, was the expert speaker. There are almost 180 registered participants. Participants include professors, students, and industry representatives from around the nation. The webinar session was beneficial and educational for all attendees.



- The Department of Electrical and Electronics Engineering at Bhagwan Parshuram Institute of Technology in Delhi and the Electrical Engineering Department at Visvesvaraya National Institute of Technology in Nagpur jointly organized a national webinar on the topic Solid State Transformers: Configurations, Applications, and Challenges on the web platform Google Meet on 11th July 2020. The IEEE PES 1AS Delhi Chapter sponsored the webcast. Dr. Pradyumn Chaturvedi (Ph D), SMIEEE, LMISTE, MIAENG, Department of Electrical Engineering, VNIT Nagpur served as the resource person. The webinar was a huge success, with over 350 participants from around the nation, including academic members, students, and industry professionals.
- As Artificial Intelligence is a multidisciplinary field of study, it represents a bright future for all technocrats. On July 25 2020, the EEE and ECE departments together hosted a webinar on Artificial Intelligence and Expert Systems with Shri R. K. Singh, ICT and Broadcast Media Consultant, and Former Engineer-in-Chief, Door darshan.
- In March 2020, students of B.Tech (EEE) 3rd and 4th year visited Tata Power DDL Substation. The students got the practical exposure of equipment used, and the operation of the substation.
- In December 2019, final-year B.Tech (EEE) students Birla Singha and Kunzos won the second prize in the GGSIP University's project competition. Students created an ingenious method for creating an electric blanket.









#### STUDENTS CORNER

#### **ELECTRIC VEHICLES:**

Electric Vehicles are means of transport that consume electric energy as fuel instead of traditional fuels such as petrol, diesel, and CNG. These vehicles may be powered through a collector system by electricity from off-vehicle sources or maybe inbuilt with a battery, solar panels, fuel cells, or an electric generator to convert fuel to electricity. Electric bikes, electric cars, electric rickshaws, etc are some examples of electric vehicles. Most of the trains including metros are already running worldwide through electricity.

The technology of electric vehicles has been around since the turn of the nineteenth century but faded as the gasoline powered engine took the spotlight. Now the future of electric vehicles is very bright. Their impacts are very significant ranging from economic, to new technology that can be applied elsewhere, to most importantly, the environment.

Recently Delhi Government has launched 'Switch Delhi' campaign a Jan Aandolan to promote use of electric vehicles. This initiative has been taken by Delhi Government to cut down air pollution caused due to smoke emitted by traditional petrol & diesel vehicles. Earlier in August 2020 Delhi Government introduced Delhi EV Policy. Under this policy Delhi Government provides waiver on road tax, benefits up to Rs.1.5 lakh on four wheelers and more.

Recently Union Cabinet has also approved setting up of a 'National Mission on Transformative Mobility and Battery Storage' to promote clean, connected, shared, sustainable and holistic mobility initiatives.

#### BENEFITS:

- Reduced fuel costs
- · Lower maintenance costs
- Enhanced energy security
- Reduced air pollution (with associated health benefits)
- An improved driving experience
- Greenhouse gas emissions can be eliminated if EVs are charged using renewable energy.



