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 Prof. Neeraj Sharma



The Institution of Engineers (India)

## TWO DAY WORKSHOP

On

Applications of Power Electronics in Electrical Systems

January 15-16, 2019

## REGISTRATION FORM

Name \_\_\_\_\_  
 Designation \_\_\_\_\_  
 Company / Organization \_\_\_\_\_  
 Address \_\_\_\_\_  
 \_\_\_\_\_ Pin \_\_\_\_\_  
 Tel. No. \_\_\_\_\_ Mobile No. \_\_\_\_\_  
 E-mail : \_\_\_\_\_  
 IEI Membership No. \_\_\_\_\_  
**Payment Details (for Registration Fee only)**  
 Paid an amount of Rs. 500/- for any one and Rs.300/- for IEI member on account of registration fees for attending the **Two Day Workshop on "Applications of Power Electronics in Electrical Systems"**.  
 Mode of payment : Cash / Demand Draft  
 \* DD to be made in favour of "The Institution of Engineers (India)" payable at Chandigarh.  
 Demand Draft No. \_\_\_\_\_ Dated \_\_\_\_\_  
 Bank Name \_\_\_\_\_

Name and signature of the participant:

Date:

For office use:

Verified the receipt of the registration fees of Rs. \_\_\_\_\_

Authorized signatory

Designation Signature

You may also use photocopy for multiple forms



The Institution of Engineers (India)

"98 years of relentless journey towards  
Engineering Advancement for Nation Building"

## TWO DAY WORKSHOP

ON

"APPLICATIONS OF POWER ELECTRONICS  
IN ELECTRICAL SYSTEMS"

on

January 15 - 16, 2019

Organized by

The Institution of Engineers (India)

Punjab & Chandigarh State Centre

Under the Aegis of Electrical Engineering Division, IEI

In Association / Collaboration with



BBSBEC

Baba Banda Singh Bahadur Engineering College,  
Fatehgarh Sahib, Punjab

Venue :

BABA BANDA SINGH BAHADUR ENGINEERING COLLEGE,  
FATEHGARH SAHIB, PUNJAB

## ABOUT THE INSTITUTION OF ENGINEERS (INDIA)

The Institution of Engineers (India) or IEI is the largest multidisciplinary professional body that encompasses 15 engineering disciplines and gives engineers a global platform from which to share professional interest. IEI has membership strength of nearly 0.7 million. Established in 1920, with its headquarters at 8, Gokhale Road, Kolkata 700020, IEI has served the engineering fraternity for over nine decades. In this period of time it has been inextricably linked with the history of modern day engineering. In 1935, IEI was incorporated by Royal Charter and remains the only professional body in India to be accorded this honour. IEI functions among professional engineers, academicians and research workers. It provides a vast array of technical, professional and supporting services to the Government, Industries, Academia and the Engineering fraternity, operating from over 100 centres located across the country. For details visit [www.ieindia.org](http://www.ieindia.org). The Punjab State Centre of the Institution of Engineers was located at Lahore before partition of India. After 1966, when Haryana and Himachal established their separate centre, this Centre was named as Punjab & Chandigarh State Centre. The foundation stone of this building was laid in 1966 by Sardar Pratap Singh Kairon, the then Chief Minister of Punjab. Located in center of city beautiful and equipped with all kind of infrastructure to organize such seminars

## ABOUT THE BBSBEC

Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib, was established in the year 1993, by Baba Banda Singh Bahadur Education Trust formed under the patronage of Shri Mani Gurudwara Prabandhak Committee, Sri Amritsar, with the approval of the Govt. of Punjab. The college is approved by the A.I.C.T.E., New Delhi, Ministry of H.R.D., Govt. of India and is affiliated to Punjab Technical University, Jalandhar. The college has earned accreditation from the NBA (AICTE) and International Accreditation Organization (IAO) for various programmes.

## ABOUT THE WORKSHOP

With increasing growth in the field of Electrical drives, drives has made tremendous contribution in every part of life. Instead of going for Conventional Drives, people are using Smart Drives now a days. This workshop has been proposed to offer an opportunity to experts to discuss recent trends in converters for applications in the field of Electric Drives, Smart grids and Micro grid technologies. The smart intelligent drives, will be able to collect the data directly from the motor and no additional sensors will be needed anymore. The data obtained from the motor is being used to determine the health of the drive system. Miniature motors has reduced size and weight which enhances the efficiency and reliability of the drives. The smart grid can be linked through a network operating system, this opens a whole set of new possibilities. The new generation grids are capable of self diagnosing the faults for the power of future. Hands on sessions will be conducted for converter design and modeling. The main motivation of this workshop is to flourish power electronics applications as a unique platform for cutting edge technology and attract design practitioners from various industries and research institutes across India by demonstrating in house product design, modelling and hardware implementation capabilities.

The course shall comprise three technical sessions spanning over two days as listed below:

### Session 1:

- ✦ Concepts of power converter technologies for Electric Drives
- ✦ Improving efficiency of the electrical machines by means of control

### Session 2:

- ✦ Converter topologies and control techniques
- ✦ DC-DC converters
- ✦ DC-AC Converters
- ✦ AC-DC Converters
- ✦ Hands on Converter design and modeling

### Session 3:

- ✦ Introduction to Smart Grid technologies
- ✦ Smart Grid - Indian Perspectives
- ✦ Integration of Generation from Renewable Energy Sources with Grid
- ✦ Net Metering and Micro Grid
- ✦ Smart Sensors and Advanced Metering Infrastructure

### Who can attend?

Faculty, students and researchers from any educational institute, research centre or industry can participate in the workshop.

### How to register?

To attend the workshop, kindly register before the last date by submitting your details as per the given format along with the registration fees.

**Last Date for registration :** Dec 18, 2018  
**Registration fees :** Rs. 500  
Rs. 300 (for IE(I) members)

### Dates and Venue

The workshop will be held for two days on **January 15 and 16, 2019** at the premises of **Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib.**

**All correspondence may be addressed to :**

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