

## ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON

# **Research Potential in Advanced Power Electronics & Renewable Energy**

(23rd - 31st May, 2022)

Organized by



E & ICT Academy & Department of Electrical Engineering, NIT Warangal

In Association With

New Horizon College of Engineering (NHCE) Bengaluru & IEEE Power Electronics Society Bangalore Chapter (Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)

#### Preamble:

Electronics & ICT Academy was set up at NIT Warangal with financial assistance from MeitY, Gol. The role of academy is to offer faculty development programmes in emerging areas of Electronics, Information Communication Technologies; training & consultancy services for Industry; Curriculum development for Industry; CEP for working professionals; Advice and support for technical incubation and entrepreneurial activities.

This FDP is designed to address research advancements in Power conversion topologies and applications in the industry and to encourage various zonal professionals'/students/academicians towards research and for their Academic Quality Improvement too. This course will offer a unique opportunity to all the participants in the relevant topics in Real Time Power Electronic systems and its applications through theoretical sessions and simulation plus laboratory-based experiments and demonstrations. It is due to development of switching devices, magnetic components, control techniques, computational methods, DSP/FPGA controllers, etc. Applications of power electronics can be found in several areas like Renewable industry, Energy, transportation, medical. telecommunication, residential energy systems, electric vehicles etc. Certain low and high power switching converters are developed in these areas. Also, this FDP aims at giving scope for future research.

### **Objectives:** FDP aims at giving scope for future research on:

- Power converters for renewable energy interface.
- High Power Density Converters for electronic products
- High Bright LED lighting systems for indoor/outdoor applications
- Advanced Electric Drives and Control Techniques for EVs
- Energy Efficient Drives especially for elevators
- Hands on exposure to renewable integration & power converters.
- Enabling technologies for high power density converters.

### **Registration Fee Particulars:**

Faculty and Research Scholars	Rs. 500 /-
Industry Participants	Rs. 1500/-

#### Participants are required to pay the Registration Fee Online using the following NEFT transfer details:

**Online Transfer Details** : Electronics & ICT Academy NITW **Account Name** : 62423775910 Account No

IFSC code : SBIN0020149 **Bank and Branch: State Bank of India, NIT(REC) Warangal** 

Resource Persons: Young & Energetic eminent & finest Researchers & Faculty from International Universities IITs, NITs, IIITs & Industry experts.

Eligibility: Faculty/Ph.D. scholars of Electrical Engineering/allied disciplines & Industry personnel.

How to apply: Participants are required to apply through online registration form by clicking on the following link:

https://forms.gle/robHtD2M9W6ff4Um7

#### **Selection Criteria:**

Selection will be done based on first-come-first-serve basis to a maximum number of 100 (hundred). The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the Online/DD payment will be sent back. Candidates will be issued satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

#### **Important dates:**

Last date for Application with fee: 19th May 2022 Selection List by Email: 20th May 2022.

## **About NITW, EE Department, Warangal:**

NIT Warangal, formerly known as Regional Engineering College was established in 1959. Over the years it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 14 Departments offering eight undergraduate and 32 postgraduate programmes besides doctoral programmes. About 5000 students across the country and about 500 international students study on the campus. Its R & D activities have gained momentum with funding/MoU from governmental agencies/industries.

The Department of Electrical Engineering was established as one of the major departments of NITW, in the year 1959. It offers B.Tech in Electrical & Electronics Engineering, M.Tech program in Power Electronics & Drives and Power Systems and Ph.D program. Warangal is known for its rich historical and cultural heritage. It is situated at a distance of 140Km. from Hyderabad. Warangal is well connected by rail and road. National Institute of Technology campus is 2 Km. away from Kazipet junction and 12Km. away from Warangal station.

## **About NHCE, EEE Department, Bangalore:**

NHCE is an Autonomous college affiliated to Visvesvaraya Technological University (VTU), approved by the All India Council for Technical Education (AICTE) & University Grants Commission (UGC). It is accredited by NAAC with A' grade & National Board of Accreditation (NBA). New Horizon college of Engineering is located in the heart of the IT capital of India, Bangalore. The college campus is situated in the IT corridor of Bangalore surrounded by MNCs and IT giants. NHCE boasts of state-of-the-art facilities for its students. They are given utmost encouragement in their areas of interest by providing hi-tech facilities backed by faculty support.

The Department of Electrical and Electronics Engineering is one of the prestigious branches of Engineering and one among the oldest departments of NHCE-Bangalore started in 2001. The EEE Department has been playing a vital role in producing engineers and technologists of high caliber ever since it was established in the year 2001. A critical investigation and innovation into the modern state-of-art and cutting edge technology lead to the fact that an electrical graduate fits better in today's competitive world.

At EEE Dept., NHCE, Indo-French Center of Excellence in Electricity, Automation and Energy (IFCEEAE) is an initiative evolved through "MoU" with French Ministry of National Education and Schneider Electric India Pvt. Ltd., and Dept., is actively involved in the various research projects STTP's/FDP'S funded by AICTE, VGST and VTU.

#### **Coordinators:**

Dr. B. L. Narasimharaju **Associate Professor Electrical Engineering Dept.** NIT Warangal, Pin:506004

Email: blnraju@nitw.ac.in Mobile: 9448401052

Dr. M Mahesh **Professor EEE Dept.** 

NHCE, Bengaluru, Pin: 560103 Email: maheshnhce@gmail.com

Mobile: 80735 68768