ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON MODELLING, SIMULATION AND CONTROL OF ADVANCED POWER CONVERTERS (21st – 29th March, 2022)
Organized by
E & ICT Academy & Department of Electrical Engineering, NIT Warangal
In Association With
Gokaraju Rangaraju Institute of Technology, Hyderabad
(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, Govt. 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 industry, transportation, medical, telecommunication, residential, energy systems, 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.
- Master techniques of design-oriented analysis for switched-mode power converters
- Verify the design of closed-loop regulated power converters using switching and averaged circuit simulations
- Modern Electric Drives and Control Techniques for EVs
- Design input filters for switched-mode power converters
- Advanced power converters for various applications.
- Provide hands on exposure to real time digital control techniques.
- Simulation practice of high gain converters, PV fed converters.
- AC & DC powered LED drivers, Bidirectional DC-DC 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
- **Account Name**: Electronics & ICT Academy NITW
- **Account No**: 62423775910
- **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, III Ts & 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/24PqmUfNs9Jnnyyw8

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**: 17th March 2022
- **Selection List by Email**: 18th March 2022.
- FDP Duration: 21st to 29th March 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 GRIET, EEE Department, Hyderabad:
GRIET is a premier institute of engineering, established in the year 1997 under the patronage of the Gokaraju Rangaraju Educational Society. The college is approved by AICTE and is affiliated to JNTU, Hyderabad. It has been given autonomous status by UGC. All the programs are accredited by NBA under Tier-I. The Institute is accredited by NAAC with A+ grade. The mission of GRIET is to achieve and impart quality education with an emphasis on practical skills and social relevance. GRIET strives to provide state-of-art infrastructure.

The Department of Electrical and Electronics Engineering was established right from the inception of the institute in 1997. Department offers 1 UG Program (B.Tech-EEE) and 1 PG Program (M.Tech - Power Electronics), with a present intake of 60 UG and 12 PG students per year. M.Tech Power Electronics and B.Tech EEE programs are accredited by NBA under Tier-I. Received Best Student Project Award from ISTE in 2017. The department had received gold medals for two consecutive years as toppers of JNTUH. The department is approved as recognized JNTUH research centre. The department undertakes consultancy projects for industries and actively involved in the various research projects worth Rs 2 Crore funded by AICTE, DST and other organizations.

Coordinators:
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  - Email: doggarav19@gmail.com
  - Mobile: 9381694994

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