Short Term Course on

Advances in Power Electronics and Renewable Energy Resources (APERER-2017)

July 21-23, 2017

Registration Form

Please complete the details below and mail along with the registration fee to the Convener APERER-2017

1. Name(Mr./Ms.) _____

2. Category: **Academic/Industry/Student**

[For registration as student, please enclose a bonafide certificate/copy of I-card from parent institution]

3. Organization: _____

4. Address:

_____

_____

_____

5. Tel. No. (Mob): _____

6. E-mail ID: _____

7. Highest Acad.Qualification: _____

8. Bank Draft No.:_____Dt _____

9.Amount Rs._____drawn on_____

10. Accommodation Required: Yes /No

Signature of the Candidate

Signature of the Head of the Department/Institution
(If required)

Resource Persons:

Experts from IITs, NITs, IISc., CDAC and professionals from industries

Course content:

Solar PV Systems: Overview and Challenges
Wind Energy Systems-State-of-the art
Fuel Cells: Latest development
Maximum Power Point Tracking
Power Electronics Converters for Grid Connected Systems
Power Management in Standalone Systems
Digital Control in Power Electronics
Instrumentation in Power Electronics and Renewables
Power Electronics in Microgrid and Smart grids

Organizing Committee

Prof. Rajeev Tripathi, Patron
Director, MNNIT Allahabad
Prof. Shubhi Purwar, Chairman
Head, EED MNNIT Allahabad
Prof. R. K. Tripathi, Coordinator
EED MNNIT Allahabad
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EED MNNIT Allahabad
Dr. Rajesh Gupta, Convener
EED MNNIT Allahabad
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Dr. Madhu Singh, NIT Jamshedpur
Dr. Ritesh Kumar Keshri, NIT Nagpur
Mr. R. Sudeep Kumar, HOD, PEG, CDAC
Mr. V.S.Suresh Babu, Nodal officer, NaMPET- II, CDAC

NaMPET @ MNNITALD

Short term course on

Advances in Power Electronics and Renewable Energy Resources

APERER– 2017

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Organized by

Department of Electrical Engineering
Motilal Nehru National Institute of Technology Allahabad

Under the aegis of

NaMPET Phase II

National Mission on Power Electronics Technology

Towards Power Electronics Excellence

An Initiative of

Ministry of Electronics and Information Technology (MeitY), Govt. Of India

Nodal Centre

Centre for Development of Advanced Training
Trivandrum

Preamble: Recent developments in the field of power electronics have opened up broad areas of research in advanced power electronics converters. Increased use of renewable energy resources and static power conversion devices has lead tremendous growth of power electronics based energy conversion in recent times. Fossil fuels at present have adverse environmental impact and limited availability and have to give way to renewable sources of energy. The main advantage of electricity generation from renewable sources is the absence of harmful emissions and its renewable nature. Efficient conversion of renewable sources of energy is an emergent need in every aspect of our life. Among many, the Solar Photo Voltaic (PV), Wind energy, Fuel cells have seen a tremendous growth in the past decade. It ranges from few watts to mega watts. The devices involved for power conversions using advanced power electronics technology are voltage source converter (VSC) to convert DC into AC and AC into DC. The other important converter is DC to DC and AC to AC. Developments in the field of advanced power electronics encompasses areas of Power Quality issues, Distributed Generation, High/Low Power conversion, On & Off-shore wind turbines, DC Grids, Solar PV technologies, Fuel cells, MPPT, Power balance. Renewable sources of energy and its conversion into usable form is the major concern at present. Abundant, environment friendly and cost-efficient energy is a key resource for growth of any country. Important sources of energy, like wind, solar, fuel cells, have high potential to strengthen the energy pool. These emerging energy resources require efficient and economic power conversion devices and technology.

This short term course aims to enhance the awareness of the problems and solutions of Renewable Energy Resource using advanced power technologies among the participants.

About National Mission on Power Electronics Technology (NaMPET): National Mission on Power Electronics Technology-NaMPET is a national mission program launched by the Ministry of Electronics and Information Technology (MeitY), Govt. of India, with a vision to provide the country with the capability to become a dominant player in Power Electronics Technology. Through this National level R&D Program, Research, Development, Deployment and Commercialization of Power Electronics Technology is envisaged by enhancing the indigenous R&D expertise and infrastructure in the country with active participation from academic institutions and industries. Centre for Development of Advanced Computing, CDAC, Thiruvananthapuram, a premier R&D organization under MeitY, is the Nodal Centre coordinating the activities of NaMPET.

The first phase of the program was successfully completed in 2010 and the activities under NaMPET Phase-I focused on R&D, infrastructure and awareness creation. Considering the impact, MeitY initiated the second phase of NaMPET (NaMPET Phase-II) in January 2012 aiming further strengthening of power electronics technology base in the country.

About Centre for Development of Advancement Computing (CDAC): CDAC undertakes application oriented research, design and development in electronics, so as to generate state-of-the-art producible, marketable, field maintainable products and systems. The Power Electronics group has wide experience of developing successful power electronics products/systems, and a very good industry interaction by way of transfer of technology, field implementation etc. It has very close association with reputed academic institutions like IISc, IITs, NITs and many central universities and private institutions. CDAC has contributed significantly to the growth of industry through indigenous development of commercially viable products and systems, foreign technology absorption, consultancy, training and turnkey implementation of contract projects.

About the Institute: Motilal Nehru National Institute of Technology, Allahabad was formerly known by Motilal Nehru Regional Engineering College, Allahabad. It is an institute with total commitment to quality and excellence in academic pursuits, is among one of the leading institutes in INDIA and was established in year 1961 as a joint enterprise of Govt. of India and Govt. of U.P. in accordance with the scheme of establishment of REC. However with effect from June 26th of 2002 the college became deemed university and is now known as Motilal Nehru National Institute of Technology. The foundation stone of the college was laid by the first Prime Minister of India, Pt. Jawahar Lal Nehru on the 3rd of may, 1961 on a site spreading over 222 acres on the banks of the river Ganga. The main building of college was inaugurated by another illustrious son of India, Prime Minister Sri Lal Bahadur Shastri on 18th of April, 1965. The students are extensively exposed to cross-cultural environment as candidates from various other countries such as Sri Lanka, Nepal, Bangladesh, Bhutan, Mauritius, Malaysia, Iran, Yemen, Iraq, Palestine and Thailand also join MNNIT for various undergraduate and post-graduate programs. MNNIT is fully residential institution with eight hostels for boys and two for girls.

About the Department: The Department of Electrical Engineering was started in 1961. The department has been consistently producing quality Electrical Engineers since its inception and is also involved in research and development activities. In addition to the UG program the department runs PG programs in (i) Power Electronics & Drive, (ii) Power Systems, and (iii) Control & Instrumentation. It also runs Ph.D. program in different areas of specialization of Electrical Engineering.

Registration fee:
Professionals from Industry and R&D Units: Rs. 3000/-
Faculty from universities/institutes/colleges: Rs. 2500/-
Outside Students: Rs.1000/-, MNNIT Students Rs. 500/-

Registration:
Application in the prescribed format duly sponsored by the Head of the Institution along with the registration fee in the form of a Demand Draft favouring **"APERER-2017"** payable at **Vijaya Bank or any nationalized bank at Allahabad.** Please send a scanned copy of the Demand Draft to rajeshgupta@mnnit.ac.in **on or before 10th July , 2017.**

Important dates:
Last date for registration: **10 July, 2017 (Tentative)**
Selection intimation to the applicant: **12 July 2017**

Boarding and Lodging:
Out station participant need to pay for boarding and lodging.

Program Convener

Dr. Rajesh Gupta, Convener APERER-2017

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