created by the activities under the first phase of NaMPET, DeitY initiated the second phase of NaMPET (NaMPET Phase-II) in January 2012 for five years aiming further strengthening power electronics technology base in the country.

About Centre for Development of Advancement Computing (CDAC): C-DAC undertakes application oriented research, design and development in electronics, so as to generate state-of-the-art producible, marketable, and 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 institution like IISc, IITs, NITs etc. The C-DAC has contributed significantly to the growth of industry through indigenous development of commercially viable products and systems, foreign technology absorption, consultancy and training and turnkey implementation of contract projects.

Advisory committee:

Director, NITC
Prof. H. P. Khincha, Advisor, IISc & Former VC, VTU
Prof. Gopakumar K., IISc. Bangalore
Mr. R. C. Meharde Senior Director, DeitY, Delhi
Mr. Tara Shanker, Director, DeitY, Delhi
Dr. Abraham T. Mathew, Professor & Dean (R&C), NIT Calicut
Dr. Z. V. Lakaparampil, Head PEG, CDAC
Mr. V. S. Suresh Babu, Nodal officer, NaMPET, CDAC
Dr. Jeevamma Jacob, Professor & Head, EED, NIT Calicut.

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Sivaprasad A. (Ph. No. 09496083078)
Sandeep J. (Ph. No. 09995101567)

Short term course on Power Electronics for Grid Connected Renewable Energy System

(PEGCRES -2015)

May 14-16, 2015

Registration Form

Please complete the details below and mail along with the registration fee.

1. Name (Mr./Ms./Dr.): _____
_____
2. Category: Academic/Industry/Student
3. Organization: _____
_____
4. Specialization: _____
5. Address: _____
_____
_____
_____
_____
_____
6. Tel. No. (Mob):_____
7. E-mail ID: _____
8. Qualification/Experience: _____
9. Bank Draft No.:_____Dt. _____
for an amount of Rs._____drawn on
_____ or Receipt No.
_____ (Online Payment)
10. Accommodation Required: Yes/No
11. If Yes:International Hostel/Guest House/Students Hostel

Signature

Short term course on Power Electronics for Grid Connected Renewable Energy System (PEGCRES-2015)

May14-16, 2015

Organized by

Department of Electrical Engineering
National Institute of Technology Calicut, Calicut, Kerala, India

Under the aegis of

NaMPET Phase II
National Mission on Power Electronics Technology
Towards Power Electronics Excellence

An Initiative of
Department of Electronics and information Technology, (DeitY) New Delhi

Nodal Centre
Centre for Development of Advanced Computing Trivandrum

Preamble:

Power electronics is interdisciplinary in nature and is used in a wide variety of industries from computers to chemical plants to rolling mills. The importance of power electronics has grown over the years due to several factors. Two of these are the advent of smart power devices and the increasing global concerns about the effects of environmental pollution. Smart power devices are expected to become ubiquitous and revolutionize the way power is handled. Electric vehicle is currently looked upon as a promising solution to curb urban pollution. Also, to avoid the pollution due to setting up of new power generating stations, power electronics has been called upon to ensure better utilization of existing capacity. This has resulted in research into active power factor correction, harmonic compensation etc., assuming great significance.

This course is designed to address applications of power electronics in the industry related to Converter Topology, Renewable energy integration, Grid integration Micro Grid etc. This course will offer a unique opportunity to the researchers, practicing engineers, academicians and research students working in the relevant topics in Power Electronics applications to come closer through theoretical sessions and laboratory-based experiments/ demonstrations. Professionals from academic institutes, R&D labs, user agencies like steel, railways, defense etc., and manufacturing industries in the country are welcome to participate in this short term course. This event is structured to give a wide exposure on the applications of power electronics and technology trends.

Course Content:

- Review of Power Converter Topologies
- Multilevel Inverter for Medium and High Power Applications
- Multilevel inverter topologies with reduced DC link power supply requirements.
- Microgrid - Smartgrid & DC microgrid and their Applications
- Solid State Transformers
- Grid Integration of Renewable Energy Systems
- Design of Filters for Grid connected Converters
- Mitigation Techniques for Islanding Issues
- Vehicle to gird, Vehicle to Home interfacing and Controls
- Laboratory Experiments and simulation exercises.

Speakers:

Academicians from IISC/IITs/NITs, Experts from CDAC and Professionals from industries.

Who Shall Benefit?

- Faculty, Research Scholars and students of Engineering Institutes and Polytechnic Colleges.
- Industrial professionals working in the related area.

Registration Fee:

- Professionals from Industry/R&D Units: Rs.3000/-
- Faculty from universities/Institutes: Rs. 1500/-
- Students/research scholars: Rs.750/-

Registration charge includes kit containing workshop proceedings on CD and working lunch

Mode of Payment:

Demand Draft: In favour of **"Power Electronics for Grid Connected Renewable Energy System"**, payable at SBI REC Chathamangalam Branch.

Online Payment: Name of the Account Holder: Power Electronics for Grid Connected Renewable Energy System. Account No.: **34743361812**, IFSC Code: SBIN0002207, SBI REC Chathamangalam. (Enter your name so that the receipt bears your name).

Important Dates:

Last date for registration: **30th April, 2015**

[Complete application along with registration fee should be received by the coordinator by this date]

Selection intimation to the applicant: **5th May, 2015**

Boarding and Lodging:

Accommodation can be arranged in the International hostel/Guest House/Student Hostel subject to availability and on prior payment.

Guest House: Rs. 250/- (Twin sharing per person per day)

International Hostel: Rs. 150/- (Triple Sharing per person per day)

Student Hostel: Rs: 125/- (Twin sharing per person per day)

NIT Calicut: National Institute of Technology Calicut was founded as Regional Engineering College, Calicut in 1961. Set in a picturesque at the foothills of the Western Ghats, it is located about 22 kilometers north-east of Calicut city. It is prestigious institute with a reputation for excellence at both undergraduate, postgraduate and research levels, fostering the spirit of national integration among the students and a close interaction with industry.

Dept. of Electrical Engineering: Established in 1961, the Department of Electrical Engineering of the National Institute of Technology Calicut offers programmes leading to Bachelor's Degree, Master's Degree as well as Ph.D. The four year undergraduate programme leads to the Bachelor of Technology (B. Tech) degree in Electrical and Electronics Engineering. Specializations for the Master's level programmes are (i) Instrumentation & Control Systems (ii) Power Systems (iii) Power Electronics and (iv) Industrial Power and Automation, (v) High Voltage Engineering. The major research groups in the Electrical Engineering department are Control & Instrumentation, Power & Energy, Machines & Power Electronics, Industrial Power & Automation and High Voltage Engineering. In addition to these regular programmes, this department is also actively involved in conducting faculty development programmes, job-oriented short-term training programmes, continuing education programmes for engineering professionals and academic faculty. Department has a number of sponsored projects in different areas funded by agencies like DRDO, KSCSTE etc.

About National Mission on Power Electronics Technology (NaMPET): National Mission on Power Electronics Technology-NaMPET is a national mission programme launched by the Department of Electronics and Information Technology (DeitY) under Ministry of Communications & Information Technology (MCIT), Govt. of India, with a vision to provide the country with capability to become a dominant player in Power Electronics Technology. Through this National level R&D Programme, 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 DeitY, is the Nodal Centre co-ordinating the activities of NaMPET.

The first phase of the programme was successfully completed in 2010 and the activities under NaMPET Phase1 focused on R&D, infrastructure and awareness creation. NaMPET has been successful in establishing a good network of premier academic institutes and industries. Considering the impact