

Short term course on
**Advances in Power Electronics for
Machine Drives (APEMD)**

October 21-23, 2016

Registration Form

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

1. Name(Mr./Ms.) _____

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

[For registration as student, please enclose a bonafide certificate 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

Resource Persons:

Academician from IITs, NITs, CDAC and professionals from industries

Course content:

- Power Electronics switching Devices and converters, PWM Inverter
- Fundamentals of soft computing for AC and DC drives
- Advanced Power Electronics Converters for High Power Drives.
- Advanced control techniques for industrial drives.
- Multiphase Drives.
- PMSM and BLDC drives (sensor less control).
- FPGA and DSP based AC and Dc motor drives

Organizing committee:

Dr. P.K. Biswas , HOD and Assistant Professor, NIT Mizoram

Mr. S. Majumder, Assistant Professor, NIT Mizoram

Mr. A. Bhattacharya, Assistant Professor, NIT Mizoram

Mr. S. Debnath, Assistant Professor, NIT Mizoram

Mr. R. Kumar, Assistant Professor, NIT Mizoram

Mrs. K. De, Assistant Professor, NIT Mizoram

Mrs. U. Das, Assistant Professor, NIT Mizoram

Miss. A. Islam, T.T, NIT Mizoram

Mr. Nitesh Kumar, T.A, NIT Mizoram

Mr. Lalrinmawia,T.A, NIT Mizoram

Advisory committee:

Prof. Gopal Mugeraya, Director, NIT Mizoram

Prof. U.C Ray, Former Director, NIT Mizoram

Dr. A. Shukla,Academic i/c,NIT Mizoram

Prof. H.P. Khincha, Advisor, IISc & former VC, VTU

Prof. Bhim Singh , HOD, Electrical Engg., IIT, Delhi

Mr.TaraShanker, Director, MeitY, Delhi

Dr. Gopakumar, Professor, DESE, IISc, Bangalore

Dr.Z V Lakapampil, Sr. Director & HOD, PEG, CDAC

Mr.V.S.Suresh Babu, Nodal officer, NaMPET- II, CDAC

NaMPET @ NITMZ

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**Advances in Power Electronics
For Machine Drives
APEMD– 2016**

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Organized by



Department of
Electrical and Electronics Engineering
National Institute of Technology Mizoram

Under the aegis of



NaMPET Phase II

National Mission on
Power Electronics Technology
Towards Power Electronics Excellence

An Initiative of



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

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. Development in the fields of electronic control of motion applications and materials technology have given new impetus to design of new types of energy-efficient and reliable electric motors. It is in the fitness of things - given the proliferation of new technology, mobile equipment for military and defense applications, automobile industry - that high power, small and light motors are becoming more and more sought after by the users. High energy efficiency and power to weight ratio are of paramount importance to the design of modern electric machines in the ever increasing demands of aerospace and automotive sectors. Designers strive to exploit new material through improved design and by tailoring the design to specific operating requirements and conditions. In the cutting edge technology areas, where the performance requirements are stringent, all of the issues related to electrical machine design, controller and sensors need evaluation so as to accurately predict performance and achieve the same. Thus each bit of the practical happenings must be visualized and incorporated into motor drive model to make it closer to the practical set-up. This requires clear understanding of the system interactions and developing of methods to tailor the same. That prompts us to look for a forum where we can discuss the fundamental aspects of those systems & their controllers.

About National Mission on Power Electronics Technology

(NaMPET): National Mission on Power Electronics Technology- NaMPET is a national mission programme 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 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 MeitY, is the Nodal Centre coordinating 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. Considering the impact, MeitY initiated the second phase of NaMPET (NaMPET Phase-II) in January 2012 for five years 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 etc. 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: NIT Mizoram was started in the year 2010 in the scenically beautiful state of Mizoram with an objective to impart education, research & training leading to B.Tech, M.Tech & PhD. degrees. This institute has been declared as an Institute of National Importance by an Act of Parliament. Wrapped between clouds and mountain rocks, which adds to its beauty it is amongst the most educated states of our country with a literacy rate of 91%. It also beholds a very peaceful and calm environment suitable for studies. The institute is situated in the capital city Aizawl which can be reached by Air through Kolkata / Guwahati. Silchar is the nearest railway station to Aizawl. The journey (by road) from Silchar to Aizawl may take approx. 6 Hrs. Now NIT Mizoram is working under the Ministry of Human Resource Development, Govt. of India.

About the Department: Electrical and Electronics Engineering was one of the first three disciplines in the B. Tech programme that had started in NIT Mizoram since July 2010, while it was functioning under the mentor Institute, VNIT, Nagpur. Since its inception in 2010, the department has been actively engaged in teaching and research in diverse fields of Electrical and Electronics Engineering with well experienced faculty. The department offers a UG Program in Electrical & Electronics Engineering, PG Programs in the specializations of Power Electronics & Drives and also offers Ph.D Programs of Electrical and Electronics Engineering. All along, the department has been at the modernization of the curriculum for both UG and PG courses.

Registration fee:

- Professionals from Industry and R&D Units: Rs. 3000/-
- Faculty members from universities/institutes/ research scholars: Rs. 1500/-
- 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 "NIT Mizoram" payable at SBI, Bawngkawn. Please send a scanned copy of the Demand Draft to pabitra.eee@nitmz.ac.in should reach the coordinator on or before 18th October, 2016.

Important dates:

Last date for registration: 18th October, 2016

[Complete application should be received by the coordinator by this date]

Selection intimation to the applicant: 20th October 2016

Boarding and Lodging:

Out station participant need to pay for accommodation and fooding.

Program coordinator:

Dr. P.K. Biswas

HOD and Assistant Professor

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NIT Mizoram India

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Co-Coordinator

Mr. S. Majumder

Assistant Professor

Department of Electrical and Electronics Engineering

NIT Mizoram India