



Faculty Development Program (FDP) on “Emerging Applications of Advanced Power Electronic Converters”

Date : September 20th – September 24th , 2021

Organized by:

Department of Electrical Engineering,
National Institute of Technology Meghalaya

Venue:

National Institute of Technology Meghalaya
Shillong-793003

Invited Speakers



Prof. K. Gopakumar
Dept. of Electronic Systems Engineering,
IISc Bangalore



Prof. Kishore Chatterjee
Dept. of Electrical Engineering,
IIT Bombay



Prof. Mukesh Kumar Pathak
Dept. of Electrical Engineering,
IIT Roorkee



Prof. Pramod Kumar Meher
Sandhaan Labs Private Limited,
Bhubaneswar



Dr. Sanjib Kumar Panda
Dept. of Electrical & Computer Engg.,
National University of Singapore



Dr. Sanjeet Kumar Dwivedi
Project Leader in Drive Intelligence,
Danfoss Power Electronics, Denmark



Dr. B. Chitti Babu
Dept. of Electronic & Communication
Engineering, IIITDM Kancheepuram

Supported by

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

and

Central Power Research Institute
(An Autonomous Society under Ministry of Power, Govt. of India)

Topics to be Covered

- Power Electronics & its Application in Modern Society.
- Review of Various Converters/ Inverters.
- Multi-Level and Multi-Pulse Converters.
- Application of Advanced Power Electronics Converters in AC & DC Drives.
- IoT-Based Advanced Power Drives.

Target Participants

Faculty members of AICTE recognized Universities and Engineering colleges all over India, Research scholars, students and Industry personals.

Registration Details

Interested candidates can register by filling the form in the below-mentioned link by 05:00 PM of 16/09/2021:

<https://forms.gle/bVQvebYY29SgtdNH9>

Registration Fees

Faculty/ Industry personals: Rs. 500/-
Ph.D Research Scholars: NIL

Payment Mode

On-line payment can be done on the below-mentioned bank account:

Account Name – NIT Meghalaya R and D Account

Account No. – 23730110010280

IFSC – UCBA0002373

Bank (Branch) – UCO Bank (Laitumkhrah)

Contact

- Dr. Atanu Banerjee
Email: atanu_banerjee@nitm.ac.in (Ph. No. 9485177068)
- Mr. Pratikanta Mishra
Email: pratikanta.mishra@nitm.ac.in (Ph No. 9439223002)

Local Organizing Committee

Patron:

Prof. B.B. Biswal, Director, NIT Meghalaya

Program Chair:

Dr. Sanjoy Debbarma, Assistant Professor, HOD-EE, NIT Meghalaya

Organizing Chair:

Dr. Atanu Banerjee, Associate Professor, EE, NIT Meghalaya

Organizing Members:

Faculties of Department of Electrical Engineering

Student Committee:

Dr. Hari Charan Nannam, Research Associate, EE, NIT Meghalaya

Mr. Pratikanta Mishra, PhD Scholar, EE, NIT Meghalaya

Mr. Sushanta Nath, PhD Scholar, EE, NIT Meghalaya

Mr. Manish Kurre, PhD Scholar, EE, NIT Meghalaya

Mr. Shibaji Mondal, PhD Scholar, EE, NIT Meghalaya

Mr. Subhasis Banerjee, PhD Scholar, EE, NIT Meghalaya

About National Institute of Technology Meghalaya

The National Institute of Technology (NIT) Meghalaya is one among the thirty one NITs in India established under the NIT Act 2007 (Amended 2012) of the Parliament of India as Institutes of National Importance with full funding support from the Ministry of Human Resource Development, Government of India. NIT Meghalaya took birth in 2010 and started functioning from its temporary campus in Shillong since 2012. NIT Meghalaya has secured 14th position among the 31 NITs across the country, according to NIRF 2020, MHRD.

Its permanent campus is being set-up at Sohra (Cherapunjee). The campus will come up with state-of-the-art infrastructures and all the necessary modern amenities while maintaining harmony with the serene environment of Sohra. The aim is to build it to be the centre of excellence in education and research in the fields of engineering, science and technology. The vision is to develop it to be an institution vibrant with academic activities and bubbling with youthful creative energy. The challenge is to overcome the apparent deficiencies due to its location and turn them into advantages.

The Institute's efforts since the starting of its functioning in Shillong have been to set-up the best facilities within the limited available space. Being in a nascent stage the Institute needs lots of support and care from all quarters to bring it up. Presently the Institute offers various programs such as B.Tech, M.Tech, M.Sc, and Ph.D in various departments of engineering, science, and humanities.

About the FDP

This Faculty Development Programme (FDP) is devoted to cover certain specific applications of advanced power electronic converters, where there is increasing demand for improved converter topologies, control techniques, energy management, and more. In this, we will focus on a large variety of applications, including smart appliances, highly efficient power converters, power quality improvement techniques, recent trends in electric vehicle technology, and efficient electric drives. The details of multi-level and multi-pulse converters, quality improvement of power supply will be elaborated in detail. The proposed program will provide an opportunity to faculty, students, and industrial personnel to know the latest advances in power electronics and drives, real-time implementations, associated problems and measures to overcome them, and possible areas of research. The program will include expert lectures on relevant topics. This program will focus on the concept of power electronics and its application in improving the performance/ efficiency of the electrical system. The Five-day lecture will be taken by a group of experts in different areas of power electronics with the experience of years to decades in the industry and academics. Overall, this FDP is serving to be a great platform to upgrade their knowledge in Power Electronics application in all relevant areas.

About Department of Electrical Engineering, NIT Meghalaya

The EE department started since the inception of NIT Meghalaya. Presently the department offers B.Tech, M.Tech, and PhD Programs. The department aims to impart high quality education to the students and carry out fundamental and industry oriented research work. The research interest of faculties includes various areas such as Power system Control, Smart Grid Technology, Power Quality and Renewable energy integration to grid, Power Electronics & Drives, Control System and Instrumentation, Signal Processing and Biomedical Instrumentation, High Voltage Engineering etc.

About Shillong

Shillong, popularly called as the Scotland of East, is situated at an average altitude of 4,908 feet (1,496 m) above sea level, with the highest point being Shillong Peak at 6,449 feet (1,966 m), is a popular tourist destination. With the temperature 50-70 °F during the month of March, the city gifted with bountiful of scenic pine trees in the hilly terrain. Shillong is a great cocktail of cultures with coexistence of paradoxical worlds such as the folk and the westernized, virgin forests and car-choked streets, ancestral values and modern outlook.