

Five Day Online Workshop
On
The Development of the Energy
Internet of Things (eIoT) in
Green Energy Infrastructure
1st to 5th September 2020
(Sponsored by TEQIP-III)



Coordinators

Dr. Dulal Chandra Das
Dr. C. Bhattacharjee
Dr. D. Koteswara Raju
Dr. Tapan Pradhan

Organized by



Electrical Engineering Department
National Institute of Technology Silchar

About the Institute

National Institute of Technology, Silchar is one of the 31st National Institutes of Technology of India and was established in 1967 as a Regional Engineering College (REC) in Assam. In 2002, it was upgraded to the status of National Institute of Technology and was declared as Institute of National Importance under the National Institutes of Technology Act, 2007. NIT Silchar is a fully residential campus situated on the bank of river Barak and on a sprawling campus spread over 625 acres of land surrounded by scenic tea gardens on the outskirts of Silchar. NIT Silchar is a teaching and research institute which is in the top 50 in engineering category of NIRF ranking.

About the Department

The Department offers B. Tech in Electrical Engineering and M. Tech in two specializations (i) Power and Energy Systems Engineering & (ii) Control and Industrial Automation. This department also offers Ph. D in Electrical Engineering. The state-of-the-art Lab facility exists in the department like Machine Lab, Power Systems Lab, Advance Control Lab Microprocessor & Embedded System Lab and Computational Lab, etc. to name a few. The department regularly organizes seminars, workshops, conferences at national and international level. The faculty members are specialized in diverse fields and there is a commendable research ambience in the Department.

Department of Electrical Engineering takes up R & D projects sponsored by various funding agencies.

COMMITTEE

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Director, NIT Silchar

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About the Workshop

Recent advances in Internet of things (IoT) as well as renewable energy generation have been the impetus towards development of energy internet of things (eIoT) for better energy management. The eIoT offers wide number of applications in the energy sector, i.e, in energy supply, transmission and distribution, and demand. It adopts a huge number of distributed energy-generating facilities, distributed energy storage facilities, and IoT technologies to implement energy sharing, promote utilization of electrical grids, and maintain safety of electrical grids. The implementation of IoT i.e, the usage of wide area measurement (WAMs) and Phasor measurement units (PMU) in conventional grid transforms in to a Smart grid. The eIoT can be employed for improving energy efficiency, increasing the share of renewable energy, and reducing environmental impacts of the energy usage. This TEQIP III sponsored workshop provides an opportunity to the students, research scholars, faculty and industrial participants in the research and development of idea on the application of eIoT in green energy infrastructure, in general, and in the context of smart grids particularly.

Topics to be covered

- Energy harvesting using Energy Internet of Things (eIoT).
- Smart grid structure using eIoT.
- Smart eIoT for green energy.
- Intelligent energy management.
- The development of eIoT within energy infrastructure.
- Energy Internet of Things (eIoT) as a potential solution to the energy management change drivers.
- IOT for Home Automation.

Resource Persons (External Experts)

- Prof. (Dr.) D. P. Kothari, (Retired Prof.) IIT Delhi.
- Prof. (Dr.) K. Shanti Swarup, IIT Madras.
- Prof. (Dr.) Suryawanshi H. M, VNIT Nagpur.
- Dr. Vilas Warudkar, MANIT Bhopal.
- Dr. Somnath Sengupta, IIT Kharagpur.
- Dr. Ritesh Kumar Keshri, VNIT Nagpur.
- Dr. Singh Arvind Ramnarayan, Shandong University, P.R. China.
- Dr. J. Balamurugan, TANGEDCO (formerly TNEB).
- Dr. Taha Selim Ustun, Fukushima Renewable Energy Institute, AIST, Japan.

Resource Persons (Internal Experts)

- Prof. Nidul Sinha, EED, NITS.
- Prof. (Dr.) B.K. Roy, EED, NITS.
- Prof. (Dr.) N. B. D Choudhury, EED, NITS.
- Dr. L. C. Saikia, EED, NITS.
- Dr. Wasim Arif, ECD, NITS.

Important Dates

Last date (Online Registration): 28-08- 2020
Confirmation by E-mail: 30-08-2020
Duration: 01-09-2020 to 05-09-2020

Eligibility

This program is open to faculty members, research scholars, PG & UG Students, and industrial personnel.

Registration

Registration fee: Nil

Number of participants is limited to 100

Online Registration for the Course through the below link:

<https://forms.gle/39gf8KVLfZr3MYcYA>

Certification

E-certificates will be provided to those participants who have attended the program without any absenteeism.

Contact Details

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