Send your registration forms to

Coordinator/ STC on Photovoltaic module interconnection schemes and MPPT implementation, Saravana Ilango Assistant Professor,

Department of Electrical and Electronics Engineering, National Institute of Technology, Tiruchirappalli, Tamil Nadu – 620 015.

ABOUT THE DEPARTMENT:

The Department of Electrical and Electronics Engineering offers an undergraduate program, post-graduate programmes (Power Systems & Power Electronics) and research degrees (M.S. & Ph.D.) in various fields of Electrical and Electronics Engineering. The Department is recognized for excellence in research, teaching and service to the profession.

CO-ORDINATORS

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: Pradeep Kumar (0-90308 72166)

Short Term Course on

Photovoltaic module interconnection schemes and MPPT implementation

on 27th - 28th May 2016



Organized by

Department of
Electrical and Electronics Engineering
National Institute of Technology,
Tiruchirappalli,

Tamil Nadu - 620 015.

Scope of the Training Program:

With the growing importance for reducing the dependence on the non-renewable sources of energy, photovoltaic energy conversion has gained much popularity as a viable green alternative. Although PV modules are cheaper than ever before, yet there is a desperate need to maximize the extracted energy to gain practical returns on the huge investment on PV arrays. One of the main factors detrimental to the PV energy yield is partial shading. To minimize the mismatch losses among the modules, it is desired to reconnect the conventional seriesparallel array so as to distribute the shading effect over the entire array without altering the electrical connections of the modules. Whatever be the physical configuration of the array, the output power-voltage characteristics are non-linear, with the PV power dependent on the voltage at which it is extracted. Thus arises the need for Maximum Power Point Tracking techniques.

This course is designed to address the effect of partial shading on PV arrays, and methods to extract maximum power under all environmental conditions. The workshop methodology includes classroom lectures, case study simulations, practical demonstrations and hands-on experience on MPPT implementation.

The two-day workshop is organized with sessions on:

- Modelling of PV cells
- Impact of partial shading on PV systems
- Simulation of interconnection schemes
- Hardware implementation of MPPT schemes
- Swarm intelligence-based MPPT techniques
- Introduction to programming using MSP430 microcontroller
- Implementation of MPPT schemes using MSP430

The course will enlighten the participants with new paradigms and findings, practical challenges encountered and the possible solutions. The two-day workshop is anticipated to enhance the technical interaction between groups paving the way for an overall fortification of technical capabilities in the power electronics community.

Resource persons:

Faculty members from NIT Trichy with rich experience in teaching, research and laboratory development will be handling the sessions.

Registration:

Registration Fee

The registration fee includes workshop kit, working lunch and refreshments. MSP430 microcontroller kit will be supplied to each participant.

	Individual	Group (for 3
Industry delegates	Rs. 4,000	Rs. 10,000
Academicians/ faculty	Rs. 2,000	Rs. 5,000
Scholars/ students	Rs. 1,000	Rs. 2,500

Accommodation for the outstation participants may be arranged in the institute hostels on request, subject to availability.

Important dates

Completed registration forms accompanied by registration fee (in the form of DD) should reach the coordinator not later than 20^{th} May 2016. The selected candidates will be intimated by 23^{rd} May 2016 by e-mail / phone.

REGISTRATION FORM

Short Term Course

or

Photovoltaic module interconnection schemes and MPPT implementation

27th - 28th May 2016

Name :
Designation :
Organization:
Official Address :
Mobile/Telephone No:
E-mail:
Payment details
DD No.:
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(DD should be drawn in favour of "The Director, NIT, Tiruchirappalli" payable at Tiruchirappalli)

Date: