



Short Term Course
On
Off-grid Solar PV Components and Systems
October 10th -12th, 2012

Introduction

Standalone or Off-grid Solar PV system is used to generate electrical energy where Mains AC electricity is not available, for example, remote household, portable display, satellite. Off-grid system consists of PV array, charge controller, battery bank and inverter. The output of the system can be DC or AC or both for supply to DC or AC loads. The system needs to be designed for 24x7 operation over a long period of time with minimal maintenance.

Who May Benefit

The course would benefit any graduate interested in solar PV field, researchers and academicians working in solar PV area, industry personnel in design, manufacturing as well as installation of solar PV systems.

Course Content

The following topics would be covered in the course:

- Concepts of Solar Radiation, Monitoring and PV Applications
- Basics of PV modules
- SPV modules, arrays and support structure functions, specifications and interface for off-grid applications
- Batteries and other energy storage systems: Concepts & Operation in Off-grid PV Systems
- Battery operation, functions and interface for SPV off-grid applications
- Basic concepts and operation of battery charge controllers
- Battery charge controller functions and interface for SPV off-grid applications
- Basic concepts and operation of stand-alone inverters and inverter-chargers
- Stand-alone Inverter and inverter-charger functions and interface for SPV off-grid and grid-support applications
- Balance of Systems: Concepts and Interface for off-grid Applications
- Off-grid PV system design basics
- Off-grid PV system design exercise
- Off-grid/grid-support PV power plant case study
- Off-grid/grid-support PV power plant site visit

The workshop would also be an excellent opportunity for networking with your peers from industry, research labs and academia.

Faculty

The teaching faculty constitutes experts from various engineering disciplines at IIT Bombay. Experts from Solar PV power components industry and EPC integrators will be also invited to deliver training modules.

Date & Venue

Date: October 10th – 12th, 2012

Venue:

VMCC , Lecture Hall No.21
IIT Bombay, Powai,
Mumbai

Registration Details

There is limited number of seats for the course. Participants are required to confirm their registration by sending the completed Registration Form, along with the fee to the Course Coordinator. The fees must be paid by demand draft in favor of “**Registrar IIT Bombay - CEP Account .**”

Deadline for submitting the application is 1st October, 2012

Course Coordinators

Prof. Suryanarayana Doolla / Mr. Vaman B. Kuber

Email: suryad@ee.iitb.ac.in/vamank@ee.iitb.ac.in
Department of Energy Science and Engineering
Indian Institute of Technology Bombay
Powai , Mumbai-400 076

Kindly note that no income tax is to be deducted at source from course fee payments, as IIT Bombay is exempted from the same.

A confirmation email will be sent after we receive the demand draft. If you do not hear from us for over 7 days, please track your speed post. Please drop us an email at ncpre@iitb.ac.in only if the post has reached us and you have not heard from us. Your registration is complete only after we receive your demand draft along the registration form.

Course Fee

The course fee per participants will be as follows:

Participants	Amount per person (In Rs)
Industry personnel & Government Organizations	9000
Academic Institutions Faculty & Research Scholar	3000
Students	1500

The fee includes course material, lunch and refreshments.

Registration and Accommodation

Accommodation is available in the institute hostel or guest house/similar facility for limited number of participants on payment as per actual with advance request.

Room Type	Charges Per Day (excl. of service tax) Rs.
Hostel (IIT)	Rs 200
MTNL Guest House (near IIT)	
A/ C Single	Rs. 2300
A/C Twin Sharing	Rs. 1600
Non A/C Single	Rs. 1500
Non A/C Twin Sharing	Rs. 1100
Paradise Guest House (near IIT)	
A/C Single	Rs. 2000
A/C Double	Rs. 1275

Note: TA will be provided to students from academic institutions on prior request upto the sleeper class fare only.

Please contact the following for all queries related to accommodation and Registration

Contact:

Mr. Ajay P. Jadhav

Email: ncpre@iitb.ac.in

Ph: 09076803229

For information on other Solar Photovoltaic (PV) courses, please visit

<http://www.ncpre.iitb.ac.in/events.php>

For information on other Continuing Education Programs at IITB, contact:

PROF-IN-CHARGE (CEP)

OFFICE OF

CONTINUING EDUCATION PROGRAMME (CEP)

INDIAN INSTITUTE OF TECHNOLOGY BOMBAY,

POWAI, MUMBAI - 400 076.

Tel.No. : 2572 6199 (D), 2576 7060.

Email: cep@iitb.ac.in

For latest information on CEP, please visit our home page at: <http://www.iitb.ac.in/~cep/>