Short Term Course  
On  
PV System Design and installation  
May 25th - 27th, 2017

Introduction

India has launched the Jawaharlal Nehru National Solar Mission (JNNSM) in 2009-10 with the ambitious target of installing 20,000 MW of solar power, solar Photovoltaic (PV) as well as solar thermal, in the country by year 2022. The JNNSM provides incentives that promote solar PV system installations both at grid-connected PV system and off-grid PV system levels. There is several state Governments in India that are also making and implementing their own plans for promoting solar PV systems by incentivising the installations. Also, in last 1 to 2 years, the prices of PV modules have fallen significantly. Considering the scenario of favourable Government policies and reduction in prices of solar PV modules, there is a huge interest for the installation of solar PV system. In order to enable the deployment of solar PV systems in India, there is a need for large number of trained people in the solar PV area. As per the MNRE, Govt. Of India, the requirement is of 100,000 people. The trained manpower is required at various levels ranging from researchers, engineers to technician or PV system installers. This program aims at training people who install or will be going to install solar PV systems in future.

Who May Benefit

The course would benefit anybody who wants to work with solar PV system, particularly technician, trainers and engineers (or any PV system practitioner) who is working on solar PV system for design, installation and maintenance of solar PV systems of all types. The workshop would also be an excellent opportunity to learn several aspects of Solar PV technology and gets hands on experience in designing and installation of solar PV systems.

Course Content

The following topics would be covered in the course:

- Basics of electricity and related concepts
- Basics of energy, its units, quantities of energy
- Concepts of solar cells
- Interconnection of solar cells in PV modules
- Design of PV array
- Fundamentals of batteries
- Interconnection of batteries (series and parallel connections)
- Electronics that are used in PV systems
- Details about wires, their physical sizes
- Design of standalone and grid connected solar PV system
- Installation of solar PV system
- Maintenance and troubleshooting of PV components and PV system as a whole.

**Eligibility**

Individuals who would like learn about design and installation of solar PV systems, and who would like to get into business of solar PV system can attend the course. Graduation in electrical, electronics, mechanical or equivalent subject.

**Date:**
May 25th - 27th, 2017

**Venue:**
VMCC, Lecture Hall No. 31
IIT Bombay, Powai,
Mumbai -400076
Maharashtra

**Course Coordinator:**

Prof. Chetan Singh Solanki

**Accommodation**

Accommodation on twin sharing basis is available in the Institute Guest house for a limited number of participants on payment basis and with an advance request.

**The course fee per participants will be as follows:**

<table>
<thead>
<tr>
<th>Participants</th>
<th>NCPRE Fees Three Day course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry personnel</td>
<td>15000+15% service tax =17250/-</td>
</tr>
<tr>
<td>Personnel from Academic Institutions &amp;</td>
<td>10000+15% service tax =11500/-**</td>
</tr>
<tr>
<td>Government Organizations</td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>5000+15% service tax =5750/-**</td>
</tr>
</tbody>
</table>

**50% subsidy with TA/DA will be available up to 20 Faculty/Students.**

The fee includes course material, lunch and refreshments. Limited accommodation may be available for academic participants, but is not included in the above fee.
Registration Details:

There is limited number of seats for the course.

Please contact the following for all queries related to registration and accommodation:

Ms. Smita Bhattacharjee
NCPRE, IIT Bombay
Room No: 312, 3rd floor
Transit building
Near Powerhouse, hillside area
Powai, Mumbai-400076
+91-022-25764480,
smita98@iitb.ac.in

For information on other Solar Photovoltaic (PV) courses, please visit
http://www.ncpre.iitb.ac.in/events.php