Solar Photovoltaic System Design and Installation: Introduction and Practice

9-11th April, VMCC-22, IIT Bombay
Instructor : Prof. Chetan S. Solanki

Jointly organized by
National Centre for Photovoltaic Research and Education (NCPRE)
&
Million Solar Urja Lamp (SoUL) Program

Session Number	Timing	Session Title
		Day-1: 9th April
1	9 am	World Energy Scenario and Indian Perspective
2		Renewable Energy Technologies
3		Role of Solar PV and policies in India
4		Basics of Electricity
5		Introduction to Instruments
	1 pm	Lunch Break and Practical
6	2:30 pm	Introduction to Solar Radiation
7		Optimum orientation of Solar PV modules
8		Solar related measuring devices
9		Solar PV Electricity
10		Introduction of Solar PV Modules
		Practical

Session Number	Timing	Session Title
		Day-2: 10th April
11	9 am	Interconnections of PV Modules
12		Impact of environmental parameters on module performance
13		Introduction to Battery technologies
14		Application of batteries in PV system
15		Introduction to charge controller, MPPT
	1 pm	Lunch Break and Practical
16	2:30 pm	Introduction to Solar PV inverters
17		Estimation of electricity requirements for various loads
18		Types of Solar PV systems
19		Introduction to Solar PV system design
20		Example of Off-Grid Solar PV system design with DC load
		Practical

Session Number	Timing	Session Title
		Day-3-11th April
21	9 am	Example of Off-Grid Solar PV system design with water pump
22		Example of Solar Power packs for homes/industrial applications – I
23		Example of Solar Power packs for homes/industrial applications – II
24		Design of Grid-Connected Solar PV systems
25		Wires and Cable sizing
	1 pm	Lunch Break and Practical
26	2:30 pm	Junction Boxes, Combiner Boxes, Fuses, etc
27		Solar PV system Installation
28		Monitoring and Trouble-shooting
29		Introduction to Solar lamps
30		Solar Products available in the market
		Certificate Distribution