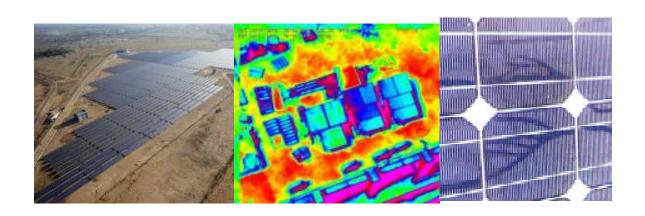
# National Centre for Photovoltaic Research and Education (NCPRE) and Solar Energy Research Institute for India and the United States (SERIIUS)

Short-Term CEP Course
On
PV Module Reliability
April 3-4, 2014



# Venue:

Seminar Hall, Room No-22, 2<sup>nd</sup>Floor Victor Menezes Convention Centre (VMCC) Indian Institute of Technology Bombay



### **Introduction:**

The Continuing Education Programme of the Indian Institute of Technology Bombay, the National Centre for Photovoltaic Education and Research (NCPRE) and the Solar Energy Research Institute for India and the United States (SERIIUS) are jointly organizing a two-day short course and workshop on "PV Module Reliability".

With the unfolding of the Jawaharlal Nehru National Solar Mission (JNNSM), as well as several state-level solar energy programmes, there has been a great deal of activity in setting up solar PV plants and installations in various parts of India. One concern which has been felt is the reliability of the PV modules of various technologies in the different climatic zones of India. This short course and workshop, with presentations by experts in PV module reliability from USA and India, will address these issues.

Speakers for the short course / workshop include: Dr. Larry Kazmerski (NREL, USA), Dr. G. Tamizhmani (Arizona State University, USA), Dr. Nick Bosco (NREL, USA), Dr Neelkanth Dhere (Florida Solar Energy Center, USA), Dr. O. S. Sastry (SEC, India), Dr. Anil Kottantharayil (NCPRE, IIT Bombay, India) and Dr. Liang Ji (UL, USA).

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

### **Target Participants:**

- PV plant developers
- PV module manufacturers
- PV installers, financial institutions
- PV certifying agencies
- Researchers in PV technology, modules and systems

### **Course Contents:**

The tentative list of topics covered during this course will be:

- Introduction to PV Modules
- Performance Characterizations of Commercial PV Modules
- Degradation and Failures in Crystalline Silicon PV Modules in Power Plants
- Failure in Thin Film Modules
- Standards and Certification of PV Modules
- Thermal Imaging, Electroluminescence and other Diagnostic Tools
- Thermal and Mechanical Cycling for Module Lifetime Prediction
- Degradation and Failures of PV Modules in Accelerated Testing
- Effect of Dust on Performance / Reliability and Mitigation Strategies
- PV Module Performance Data and All-India PV Module Survey
- Field Experience in India and Panel Discussion

## **Eligibility:**

A participant must have a minimum academic qualification of science or engineering. Participants may be from industry, individual or academic/research institutions. Students are not eligible for the program.