

Resource Persons :

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Workshop will combine discussions on Silicon Solar Cells and Modules with hands-on experiments.

Day 1: Solar Energy, Photo electric effect, Conversion of solar energy into electric energy with solar cell. Familiarization with Silicon cells and Modules.

Day 2: I-V characteristics of solar cells, dependence on light intensity and temperature.

Day 3: Cells in series and parallel, solar modules.

Day 4: Solar cell physics.

- I. Interaction of light and semiconductor
- II. Generation and recombination of electrons and holes
- III. Lifetime of excess carriers
- IV. Electro-luminescence and photo-luminescence
- V. Spectral Response

Day 5: Familiarization with open-source software of Solar cell simulation using PC1D simulator.

WRIC also conducts Workshop on:

- Operation and Maintenance of laboratory Equipment
- Operation and Maintenance of Opto-Analytical Laboratory Equipment
- Maintenance of Electronic Laboratory Instruments
- Computer Hardware and Networking
- Embedded Systems etc.

Western Regional Instrumentation Centre

A National Facility Centre of University Grants Commission,
New Delhi

University of Mumbai

University Grants Commission



WRIC Announces

Workshop on Silicon Solar Cells and Modules

(12th – 16th June 2023)

Venue

Western Regional Instrumentation Centre
University of Mumbai, Vidyanagari Campus, Kalina,
Santacruz (East),
Mumbai – 400 098

About WRIC:

The Western Regional Instrumentation Centre (WRIC), Mumbai, is one of the four National Facility Centers established by the University Grants Commission (UGC) in India.

WRIC was established as a part of UGC's comprehensive programme of establishing University Science Instrumentation Centers (USICs) in various universities in the Country. Regional Instrumentation Centers (RICs) were envisaged to act as resource Centers supporting USICs in the University system and to promote research in instrumentation. However, only the Western & the Southern RICs were established and at present WRIC is the only UGC institution in India, which is helping universities, colleges, USICs and research institutes all over the country.

India has an ambitious programme of generating electricity from Solar energy as part of Renewable Energy drive worldwide. WRIC of Mumbai University has been active in developing two instruments, i) Solar simulator ii) Spectral Response Meter in collaboration with NCPRE of IIT Bombay.

Workshop has been designed to build a base for this subject among teachers of colleges. Workshop will provide basic understanding of the working of Silicon Solar cells and Modules. The maximum number of participants will be 10. Last date for registration is 8th June 2023.

Eligibility:

Teachers from Science colleges / University Departments -Physics, Chemistry, Biotech, etc.

Fees:

The Registration fee for the Workshop is 1000/- and the same should be paid by cheque drawn in the favor of WRIC, Mumbai or by cash.

Certificate:

The participants will be given certificate at the Valedictory Function on the last day of the course subject to fulfilment of attendance and other requirements.

CHIEF PATRON:

Prof. Shivram Garje

I/c Director, WRIC

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Course Coordinator:

Mr. N. N. Rao,

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APPLICATION PROFORMA

Workshop on Silicon Solar Cells and Modules

(12th – 16th June 2023)

(11.00 A.M. – 05.00 P.M.)

Name & Designation of the Applicant: _____

Name & Address of the College Institution/Dept.: _____

Mobile: _____

Email ID: _____

Educational Qualification: _____

Details of Payment:

Cheque No. _____ Dated _____

For Rs. _____ or Cash _____

Signature of the Participant: _____