

RESOURCE PERSONS

The course content will be delivered from a pool of resource persons on the subject from leading prestigious academic institutions including IITs, NITs and IIITDM.

OTHER IMPORTANT INFORMATION FOR PARTICIPANTS

- The proposed workshop is meant to support motivated PG and Ph.D. level students, who are having a strong willingness to get excellence in their scientific and engineering research pursuits in the area of solar photovoltaic (PV) systems.
- The workshop will be conducted in face-face mode. Participants willing to participate in this workshop should have the provision to stay in the institute premises and accommodation will be provided at a free of cost.
- Course Registration is free for all participants.
- **Seats are limited (only 25)** and the participants are selected by organizers on first come first serve basis.
- Shortlisted candidates will be informed through their email.
- On completion of the course an objective/quiz based assessment of all participants will be done.
- TA will be provided to all the participants by producing the tickets with shortest route as per the norms.

REGISTRATION

Participants interested to attend this program Should register online in the below mentioned link:

<https://forms.gle/JDb8Fstnspqqpbzb9>

Last date of registration: **15.04.2022**

Selected participants will be informed through email.

However, selected Ph.D/P.G students should provide the NOC from the supervisor or HOD of respective institution.

CONTACT DETAILS

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For Further Assistance:

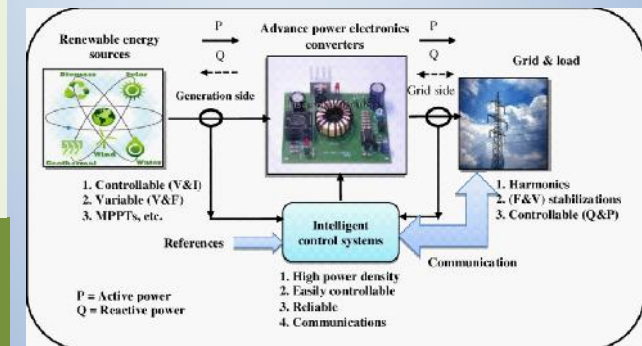
Mr. K. Sridharan, Sr. Research Fellow

Contact: 9994179911



SERB Sponsored One Week High-End Workshop on Solar Photovoltaic System (Physical mode)

02 May 2022 – 08 May 2022



Organized By
Indian Institute of Information Technology
Design and Manufacturing, Kancheepuram
(Under Ministry of Education, Govt. of India)
Chennai- 600 127, Tamilnadu.
www.iiitdm.ac.in

ABOUT THE WORKSHOP

Renewable energy systems are becoming more popular for electricity generation since they are clean and can fulfill the power requirement at the local level. They reduce the congestions in the power grid and also reduce the burden in hydro and thermal based power plants. Globally, about 20% penetration of renewable energy based distributed generation in electricity generation is considered necessary in the coming decade. Solar photovoltaic (PV) system is one of the emerging renewable energy resources which produce carbon free clean electrical power. However, due to intermittent nature of solar energy, solar PV system can't be directly connected with the grid and grid-interactive power converter with suitable control technique ensures grid connection requirements of solar PV systems including active/reactive power control, harmonic compensation, improved power quality, transient stability and grid synchronization etc., The use of more efficient control strategies would not only enhance the performance of these systems, but also improve the power quality in generation, distribution, and utilization at load end of the supply systems. . The proposed workshop covers solar PV system design and applications, including the various methods of MPPT and control techniques for their integration with the utility grid.

Topics to be covered:

- Fundamental concept of Solar PV generation and its modelling & components design.
- Maximum Power Point Tracking Techniques
- Grid integration of solar PV system including power quality and reactive power control.
- Grid synchronization techniques for grid-connected power converters and mitigation of power quality problems.
- Demonstration of Solar PV simulator and its design..
- Hands-on training on 1 kW grid-tied solar PV system and control through DS1104 R&D controller board.

ABOUT ACCELERATE VIGYAN

"Accelerate Vigyan" (AV) strives to provide a big push to high-end scientific research and prepare scientific manpower which can venture into research careers and knowledge-based economy. Recognizing that all research has at its base as development of quality, well-trained researchers; AV will initiate and strengthen mechanisms of identifying research potential, mentoring, training and hands-on workshops, on a broad-based national scale.

The aim is to expand the research base in the country, with three broad goals - consolidation / aggregation of all scientific training programs, initiating High end Orientation Workshops and creating opportunities for Training and Skill Internship.

ABOUT SERB

SERB has a vision to position science and technology as the fulcrum for social and economic change by supporting competitive, relevant and quality scientific research and development. As the premier national research funding agency, the mission is to raise the quality and footprint of Indian science and engineering to the highest global levels in an accelerated mode, through calibrated, competitive support of research and development.

Although a nascent organization, SERB can trace its existence to the erstwhile Science and Engineering Research Council (SERC), a division of Department of Science & Technology that provided extramural funding for S&T research in India for more than four decades. Creation of SERB, in year 2011, is considered as an important institutional milestone in the Indian S&T ecosystem.

IITD&M KANCHEEPURAM

The course will be organized by Indian Institute of Information Technology Design & Manufacturing (IITD&M Kancheepuram), Chennai. It is a Centre of Excellence for technical education and research established in 2007 by the Ministry of Human Resource Development, Government of India. To pursue design and manufacturing oriented engineering education and research and for promoting the competitive advantage of Indian products in global markets. The institute is located on a 51 acre campus on the outskirts of Chennai, off the Vandalur-Kelambakkam road. The Institute is presently offering UG, PG, and Ph.D programmes in Computer Engineering, Electronics & Communication Engineering and Mechanical Engineering and School of Interdisciplinary Design and Innovation.

ORGANIZING COMMITTEE

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