

Pre-Conference Event

Faculty Development Programme on Solar Energy Technology
16-22 January 2014

Post-Conference Event

Tour to the energy related sites proximate to the venue
22 January 2014

Venue

DEI ICT Distance Education Center,
Tirunelveli (MTV Puram), Tamilnadu, INDIA

Organized by

Dayalbagh Educational Institute (Deemed University),
Dayalbagh, Agra (www.dei.ac.in)

Note : List of Collaborating Institutions and Sponsors is available at dei.ac.in

Registration :

Fees -	Academic and Research Institutions :	Rs. 2500
	Industry/Commercial organizations :	Rs. 4000
	Students/Research Scholars :	Rs. 1000

Registration forms can be downloaded from the institute website
www.dei.ac.in.

Registration forms duly filled and endorsed by the Head of the Department/Institute along with a DD of registration fee in favour of "FFSM-2014" payable at Agra should be sent to the Conference Coordinator on or before 31st December 2013. Selected participants would be informed via email.

Accommodation

Participants will have to arrange their own accommodation. On request the coordinators can help by providing contact details and tariffs of nearby hotels/lodges. Please contact Sh. Jeyaram Singh for such help regarding accommodation.



Steering Committee

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- Coordinators :** Sh. Jeyaram Singh, President, TRES
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- Contact Email :** ffsm2014.dei@gmail.com
Conference update in : www.dei.ac.in

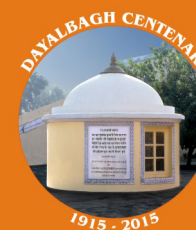
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National Conference

on

**FAST FORWARD WITH SOLAR MISSION :
THRUST AREAS AND INSTITUTIONAL
INITIATIVES IN INNOVATION,
ENTREPRENEURSHIP &
HUMAN RESOURCE DEVELOPMENT**



FFSM-2014

January 20-21, 2014



Venue

**DEI ICT Distance Education Center
Tirunelveli (MTV Puram), Tamilnadu, INDIA**

Organized by
Dayalbagh Educational Institute
(Deemed University),
Dayalbagh, Agra-282005
www.dei.ac.in

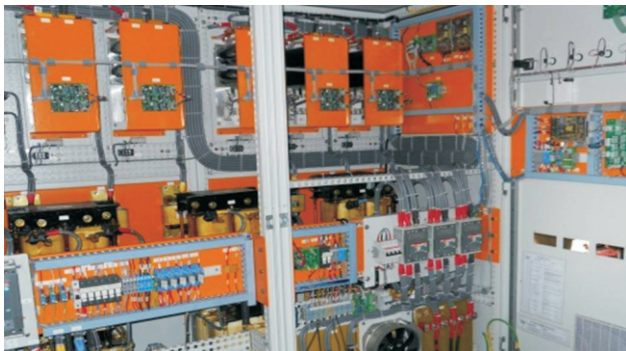
Background

The Government of India launched Jawaharlal Nehru National Solar Mission (JNNSM) in January 2010 with a view to accelerate development and promotion of solar energy technologies in the country. India has a high potential of generating solar power as availability of solar radiation in various parts of the country is considerably high. Solar PV systems represent an attractive option due to low cost and feasibility to install in various sizes (kW to MW level).

Last two years have seen a spurt of growth in Grid Interactive MW size solar electric plants, from 36 MW in 2010-11 to 1690 MW (almost 40 times) by March 2013. India expects to install an additional 10,000 MW by 2017, and a total of 20,000 MW by 2022. Distributed roof top SPV plants forming micro and mini grids are one of the effective means of implementing a solar energy strategy without posing a strain on India's available land resources. The Solar Mission of the country, supported by forward looking State level solar missions, could make solar energy a feasible alternative to conventional energy within the current decade itself. However, for a sustainable energy strategy, the role of Institutions becomes important particularly in capacity building in terms of trained human resource, R&D in cutting edge technologies, innovation and entrepreneurship development.

A seminar cum consultative meeting held on 5th October, 2013 at DEI ICT Distance Education Center, MTV Puram, attended by about 40 engineers and scientists felt that states like Tamilnadu could play a prominent role in demonstrating the feasibility of the solar alternative if a concerted effort is made by the mission agencies with the participation of academic institutions and enterprises. For this an example body SCOT (Solar Council of Tamilnadu) was mooted. The following four directions for immediate action were proposed.

1. A significant number of academic campuses in Tamilnadu could come forward to demonstrate the effectiveness of decentralized roof-top solar power plants which would ultimately pave the way for smooth transition to total renewable energy scenario. In this context, the successful complete campus solarization at Dayalbagh Educational Institute, Agra could serve as a model.
2. Such a large solar mission cannot succeed without sufficient number of well trained technicians for installation, operation and maintenance of the power plants. Besides, expertise in the area of solar energy planning, demand side management and solar electronics also needs to be developed.
3. With a view to guiding the emerging consumer market, innovation support for entrepreneurs and enterprises should also be a major agenda for educational institutions.
4. For fast forward movement of the Mission, bottlenecks need to be identified and institutional interventions worked out. A networked approach to provide institutional support is envisaged for this purpose.



Conference Objectives

The goals of the conference are

1. Defining thrust areas for state level solar missions
2. Plan for creation of decentralized roof-top Solar PV micro grids, integrated with wind and other sources, for campus energy requirements in a significant number of institutions.
3. Identification of state-specific human resource development needs and a strategy for realizing it in a time bound manner with the participation of a network of institutions.
4. Strategy for involvement of technical institutions / research laboratories / industries in the process of innovation support for enterprise development.
5. Exploring indigenous engineering support viz., prototyping, benchmarking and quality control, to provide a fillip for rapid development of solar industries in the region.

The conference would comprise of invited talks in the following areas:

1. Thrust areas, Cutting Edge Technologies and role of educational institutions
2. Campus Solarization, success stories and strategies for replication
3. Solar Architecture
4. Challenges faced by Solar Industries and need for new support structures
5. R&D, Innovation support and Enterprise development

Invited talks would be delivered by experts from NREL, USA; IITs/IISc., Solar Energy Research Labs, Industries, MNRE, DEI, etc. Besides the thematic sessions, there will be two panel discussions where representatives of energy related agencies, government and industry would participate. Poster sessions related to institutions/agencies /innovative projects would also find a place. A tour to the energy related sites of the region would be arranged on 22nd January, 2014 as a post conference event.

Expected number of Participants: 200



Dayalbagh Educational Institute

The Dayalbagh Educational Institute, a premier university of India, has emerged as a triple entity with the three fold functions of a Secondary Board, a Technical Education Board and a University. The Institute has introduced a scheme of innovative and comprehensive education in the above three domains with the aim of developing in its Alumni an integrated personality of a well-adjusted complete person. The Institute has received 'A' Grade in a recent NAAC accreditation. *The conference coincides with the Centennial Celebrations of the Foundation of Education in Dayalbagh, as also which is poised to become a vocational university campus, a Decade of Distance Learning Centre at MTV Puram.*

In order to attain the above lofty vision in a sustainable way, and in particular to realize the vision of "Eco-Village", the Dayalbagh Educational Institute has ventured into 'total' solar electrification of its campus.

This decentralised model uses 7 Roof-Top Solar Photovoltaic (SPV) power plants together supplying 518.2 kW at present. This, when combined with two more plants under erection and the existing residential units will amount to about 1 MW capacity. It also uses solar thermal cooking systems in all the hostels. In addition to the above micro grid in the main campus at Dayalbagh, Agra, about 30 kW has been installed at various Distance Education Centers of DEI in different regions of the country.

A 5kW Solar-Wind integrated system has been installed at its Melathiruvencatanathapuram (MTV Puram), Tirunelveli campus as a training test bed for the pioneering vocational stream on solar – wind electrification being launched in January 2014. This is relevant to the rural development of the region with abundant solar and wind energy.

The renewable energy initiatives of Dayalbagh Educational Institute have demonstrated that Universities, building intellectual resources through teaching-learning and research, are perfect venues for establishing renewable energy microgrids. In addition to sustainable development through clean energy technologies and self-sufficiency in energy, a university micro grid is an ideal test bed for conducting indigenous research and development through UG and PG projects and Ph.D. theses. This would ensure quality research with relevance as well as development of skilled man power and intellectual property in the area. Universities can design and implement model curriculum for vocational diploma and certificate and higher courses in solar energy technologies, provide earn-while-you-learn schemes to the students and encourage entrepreneurial start-ups through incubation cells.

