

OBJECTIVES OF THE WORKSHOP

A significant percentage of the global energy demand is expected to be fulfilled by renewable energy in near future. However, renewable energy outputs are variable due to stochastic characteristic of their sources. Electrical power system operators around the world are faced with difficulties of integrating these variable power sources into the existing power grids.

Energy storage systems are one of the possible solutions for mitigating the effects of intermittent renewable resources on networks, allowing increased renewable energy utilization, and providing flexibility and ancillary services for managing future electricity supply/demand challenges. Furthermore, particular attention is paid to some new storage technologies which hold opportunity for future smart electrical grid applications, but there is need for more research to actualize their promising potentials.

This workshop presents a comprehensive review of energy storage technologies that are currently engaged for power applications, with main focus on thermal energy storage, hydrogen storage and option for renewable energy integration.

WORKSHOP CONTENT

The major contents of the program are:

- Thermal energy storage Power-to-Gas: Thermochemical Energy Storage for Solar and Wind Energy dominated Electrical Power Generation.
- Hydrogen based energy storage technologies
- Flexibility options for renewable energy integration
- PCM/SHS based thermal energy storage

RESOURCE PERSONS

The panel of internationally renowned experts/ academics would be drawn from IISc/IITs/NITs, University of Stuttgart, Germany and Senior Executives from Industry/ Government.

Prof. HM. Groll

University of Stuttgart, Germany

Prof. SS Murthy

IISc Bangalore

Prof. Jyotirmay Mathur

Centre for Energy & Env. MNIT Jaipur

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Head, Centre for Energy & Env. MNIT Jaipur

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Malaviya National Institute of Technology Jaipur Centre for Energy and Environment



Workshop

On

Future Energy Storage Technologies

13th January, 2017

Registration Form

Full Name:

Designation:

Organization:

Qualification:-

Specialization:

Mailing Address:.....

Pin Code: Phone (M):

Email:

Accommodation required: Yes / No

Date: Signature of Participant



ABOUT MNIT JAIPUR

Malaviya National Institute of Technology Jaipur (Deemed University) is one of the premier NITs, established by Ministry of Human Resource Development (MHRD), Government of India (GOI). The institute, prior known as MREC Jaipur was established in 1963 as a joint venture of the GOI and Government of Rajasthan. Later in 2002, the college was given the status of National Institute of Technology, and on 15 August 2007, pro- claimed Institute of National Importance through Act of Parliament. Its campus spreads over 325 acres of lush green area in the central location of Jaipur. It offers undergraduate and postgraduate courses to about 4500 students, in leading fields of engineering, technology, architecture, management, & sciences. Through the internationally renowned faculty, laboratories with state of art equipment and excellent infrastructure, the institute is actively engaged in research, consultancy, and developmental activities.

CENTRE FOR ENERGY & ENVIRONMENT

The Centre for Energy and Environment has been established in 2011 to promote inter-disciplinary research and development in the field of energy and

environment. The centre currently offers M.Tech in renewable energy and breadth courses for B.Tech. It is a home to over 16 research scholars, pursuing Ph.D. in varied and advanced fields. A vast collaborative framework with reputed universities world over, the department offers ample opportunities for individual growth. The major objectives of the centre are:

- to enable sustainable and cost-efficient innovations and develop interactive facilities.
- to provide quality higher engineering education and training programs.
- to promote education and awareness related to energy and environment.
- to develop novel, efficient as well as affordable testing and standardization methods/protocols.
- to showcase cost-effective, clean and sustainable renewable energy technologies and energy efficiency.

ABOUT JAIPUR

Jaipur is well known as the Pink City and is the capital of Rajasthan. It is a famous heritage city and is well connected by road, rail and air services. It is about 250 kms from Delhi.

REGISTRATION

Participation of this event is by invitation.

TARGET AUDIENCE

The program is targeted towards Faculty Members from academic institutes, Industry Professionals & Consultants, Researchers & Students.

COORDINATORS

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Organized by

CENTRE FOR ENERGY AND ENVIRONMENT

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