

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
(A Govt.Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV Bhopal)
DEPARTMENT ELECTRICAL ENGINEERING

Event Report

Expert Lecture Topic: **Basic of Solar Energy and Job Opportunities in SPV**

Name of Expert: **Er. Yogesh Kumar Singh**, Senior Research Scientist SPV Reliability lead
Program National Institute of Solar Energy Gurgaon

Date: **03.02.18**

Brief Biography of Expert:

Er. Yogesh Kumar Singh, is working as Senior Research Scientist SPV Reliability lead Program at National Institute of Solar Energy Gurgaon, Haryana. He is a competent professional with 14 years' experience in solar project management, consultancy, skill development, testing and training. He is handling the complete project operations entailing planning, resource utilization, maintenance & operations. He has a vast experience in monitoring projects with respect to cost, resource deployment, time over-runs and quality compliance, evaluating project progress and taking adequate corrective actions, and experienced in DPR, Design and Drawing vetting of more than 100MW ground/rooftop projects. He also possess effective communication, interpersonal & problem solving skills with the ability to handle National and International Projects. He has reviewed project installations with IS & IEC standards, permits and other project documents. He possess an excellent interpersonal skills with problem solving, logical thinking and analytical abilities. He has been working in various international collaborative projects NREL-USA, AIST-Japan, Indo-UK STAPP project and SERIUS- INDO-US project. Alongwith this he is coordinating in various National as well as International training program at NISE.

Major Objectives of the Event:

An expert lecture on “Basic of Solar Energy and Job Opportunities in SPV” was conducted to share his research experience about the Solar Energy Technologies and provided brief introduction to the participants regarding:

- The salient features of Solar photovoltaic devices.
- The state-of-the art solar photovoltaic modules suitable for a variety of applications.
- The assembly, erection and commissioning of solar rooftop and solar farm for power generation applications.


- Various Entrepreneurship and employment opportunities in the field of Solar power generation

Salient points of discussion:

The speaker discussed about the concepts of solar power generation technologies and employment opportunities for skilled professionals in the field of solar PV. Major key points/highlights of the expert lecture are summarized below:

- Energy Scenario, overview of solar energy conversion devices and applications, Concept of propagation of solar radiation from the sun to earth
- Sun-Earth Geometry, Extra-Terrestrial and Terrestrial Radiation, Solar energy measuring instruments
- Estimation of solar radiation under different climatic conditions, Estimation of total radiation
- Fundamentals of solar PV cells, principles and performance analysis, modules, arrays, theoretical maximum power generation from PV cells.
- PV standalone system components, Standalone PV-system design.
- Components of grid-connected PV system, solar power plant design and performance analysis.
- Various types of entrepreneurship and employment opportunities in the field of Solar power generation

Total 112 students attended the event.


Prof. Ashish Patra
(Coordinator)