

# MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

An Autonomous Institution

Report on

## A Guest Lecture on "Renewable Energy Sources & REC Mechanism"

organized by EEE Department

30 January 2015



**Submitted by: K.V. Satheesh Babu, Assistant Professor, Dept. of Electrical & Electronics Engineering**

A guest lecture on the topic "**Renewable Energy Sources & REC Mechanism**" was conducted by the department of EEE, MITS, Madanapalle under TEQIP- II on 30/01/2015. The resource person was **Mr. V. Suresh Babu, Assistant Director, NPTI (PSTI), Bangalore.**

The programme started with an inaugural session at 10:00 AM in which the HoD of EEE Department Dr. K.V.R.B. Prasad gave opening remarks about the event. Prof. M. Raja Reddy, Dean (Academic) stressed the importance of the topic, research in this area and advised the students to make use of this of the program. Mr. K.V.Satheesh Babu, Assistant Professor, Dept. of EEE introduced the Resource Person to the gathering, later the Resource person briefly talked about topic and scope research in this area.

The first session of the day focussed on the various Renewable Energy Sources. The speaker gave an account of various New Energy Sources. He focussed mainly on Solar Energy as a substitute for conventional sources of energy. He explained the energy scenario in world with emphasis on India. With good examples the resource person explained the energy distribution of developing and developed countries. He gave brief idea about global warming, green house gases effect which is major concern today. He had presented the statistics about different renewable energy sources like wind, solar cells, biomass, fuel cells, geothermal, tidal, mini hydro etc. The resource person highlighted different methods of harnessing the renewable energy sources.

In the second session he briefed about the legislative bodies in India for making policies for Renewable Energy Sources. In this context he explained the organizational structure of Ministry of Power (MoP) and Ministry of New and Renewable Energy (MNRE). He discussed the evolution of Ministry of New & Renewable Energy and its responsibilities. He talked about the incentives given by government of India. He also explained government's foreign investment policy, Industrial policy for renewable energy sources. He emphasised that the government is providing soft loans and tax holidays for investments in the area of renewable energy sources. He later explained the legal framework Energy Conservation Act 2001 which enables to implement special tariff for co-generation and generation from renewable energy sources.

He extended his lecture with the policies for non conventional energy sources like wind energy, solar energy, tidal energy etc. Out of these non conventional sources of energy he focussed up on the solar energy, the solar cell operation and the different types of solar cells. He started discussing the Central Electricity Regulatory Commission guidelines for starting generation from renewable energy sources. Finally he concluded the session with brief discussion on Renewable Energy Certification Mechanism.