

## FACULTY ORIENTATION LECTURE

- \* **Department** : **EEE**
- \* **S.NO. of Lecture** : **03**
- \* **Room number of lecture** : **C122**
- \* **Date:** **14-08-2018**
- \* **Time** : **4.00 PM to 5.00 PM**
- \* **Name of the speaker:** **Mr.M.SAI KRISHNA REDDY**
- \* **Research Group of speaker** : **EEE-POWER ELECTRONICS**
- \* **Topic selected from (Journal /Sponsored project/Project proposal):**  
**Transformation Project**
- \* **Title of the topic** : **“Simulation and Analysis of Photo-Voltaic (PV) based Inverter System”**.
- \* **Brief description of the topic:**



The energy demand in the world is steadily increasing and new types of energy sources must be found in order to cover the future demands, since the conventional sources are about to be emptied. One type of renewable energy source is the photovoltaic (PV) cell, which converts sunlight to electrical energy, without any form for mechanical or thermal interlink. A photovoltaic (PV) inverter system is developed which consists of PV module, and inverter. Inverter is used to convert the DC output of PV module to AC. During this transformation from DC to AC, harmonics affect the power quality a lot. Thus to improve the power quality and reduce the harmonics while converting power using inverter different levels of inverters are compared and analyzed. A converter is also developed to inter-connect the PV module and inverter without disturbances.

**Number of faculty attended the lecture : 35 out of 45**

(A book will be maintained by the department and the signature of the faculty attended shall be taken on the day of lecture by the **Faculty –in-charge** of the activity)