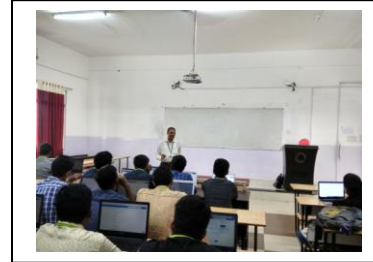


## **FACULTY ORIENTATION LECTURE**

- \* **Department** : **EEE**
- \* **S.NO. of Lecture** : **04**
- \* **Room number of lecture** : **C122**
- \* **Date:** **21-08-2018**
- \* **Time** : **4.00 PM to 5.00 PM**
- \* **Name of the speaker:** **Mr.K.P.PRASAD RAO**
- \* **Research Group of speaker** : **EEE-POWER SYSTEMS**
- \* **Topic selected from (Journal /Sponsored project/Project proposal):**  
**Transformation Project**



**Title of the topic : “Role of smart grids in smart cities and challenging solutions”**

\* **Brief description of the topic:**

Smart grids have the demand response capacity to strike a balance between power consumption and supply. Besides this, smart grids can integrate new energy sources like solar and wind with traditional sources. This will enable the citizens of smart cities to eventually integrate their solar or wind systems with the grid and start feeding unused power into the grid. This unused power, therefore, gets adjusted against the total consumption from the mains, leaving the consumers to pay only for the balance that they have consumed. Moreover, if the consumers have fed to grid more than they have consumed, they can get paid as well. The Gurgaon example must come as a stimulus for other power challenged cities. The respective State Governments must push for a new grid system that is automated and has integrated communication and IT systems that help the grid monitor power flows from point of generation to points of consumption and control the power flow or curtail the load to match generation in real time or near real time.

**Number of faculty attended the lecture : 38 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)