

# KL UNIVERSITY

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

<b>DATE</b>	: 11-07-2017
<b>TIME</b>	: 4:00 P.M to 5:00PM
<b>EVENT</b>	: Staff Colloquium
<b>SPEAKER NAME</b>	: B.Loveswara rao
<b>RESEARCH GROUP</b>	: Power Systems
<b>TOPIC TITLE</b>	: Mitigation of Unbalanced Voltages for Grid Connected DFIG Wind Farms with Sen Transformer
<b>VENUE</b>	: E104, K L University
<b>FACULTY INCHARGE</b>	: G.Mamatha

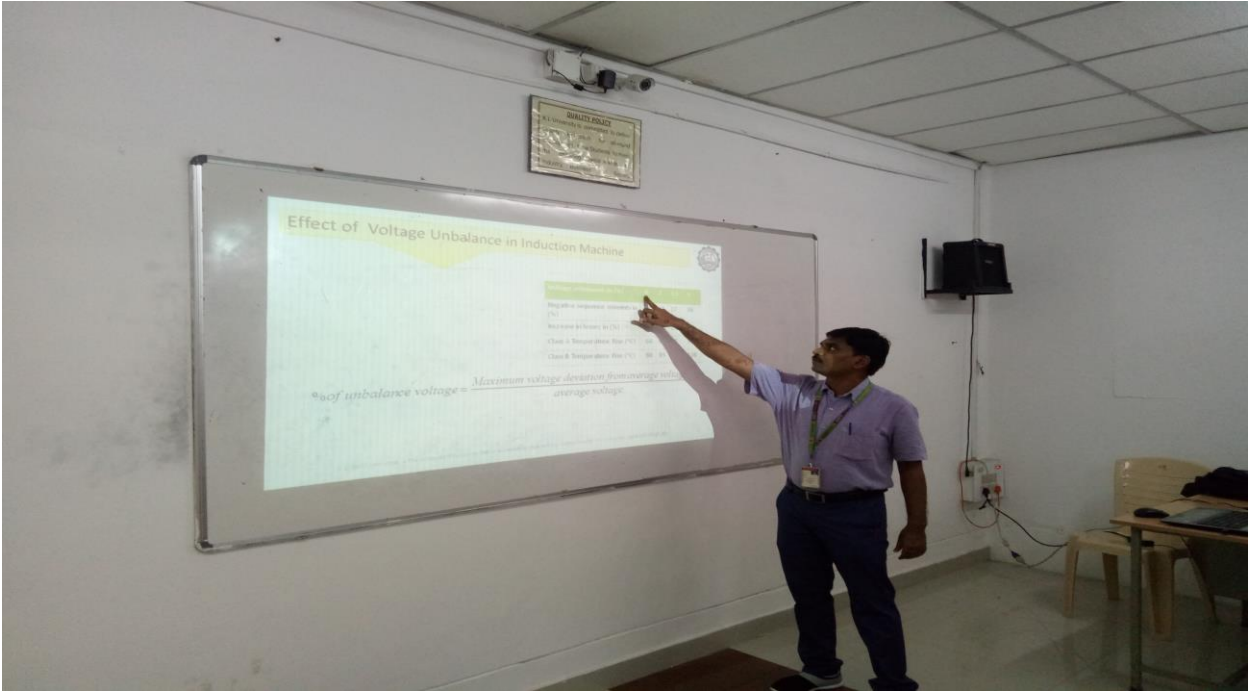
### **EVENT DESCRIPTION:**

“Staff Colloquium” is an activity organized by, Dept. Of E.E.E of KL University on 11-07-2017 from 4.00 P.M to 5:00 P.M. The Seminar is given by Mr. B. Loveswara Rao, Associate. Professor, Department of Electrical Engineering, KL-University. The topic of the Seminar is “Mitigation of Unbalanced Voltages for Grid Connected DFIG Wind Farms with Sen Transformer”. In order to contribute to the Power systems Research group mission, Seminar is organized in EEE Department to bring awareness among the faculty, E.E.E department of K L University regarding the Different Research Areas.

### **SEMINAR IN BRIEF:**

The effect of unbalanced voltage in the grid connected DFIG wind turbine may cause problems like excessive losses and mechanical oscillations. The voltage unbalance causes imbalance in current also. The temperature rise due to unbalance in currents is higher than due to unbalanced voltages. The voltage imbalance can also negatively affect the turbine torque and speed. So the generator may produce excessive noise. Therefore the efficiency and life time of the DFIG wind turbine is reduced. To overcome these problems automatic tap changing Sen Transformer is used. In this paper the effect of unbalanced voltages at DFIG has been studied. MATLAB/SIMULINK Results show that the Sen Transformer mitigates unbalanced voltages effectively.

**PHOTOS:**



Associate.Prof. B.Loveswara Rao delivered a Seminar on “Mitigation of Unbalanced Voltages for Grid Connected DFIG Wind Farms with Sen Transformer”



Faculty of Electrical Department listening the Seminar