

Industrial Visit – IISc.,Bangalore

A one-day Industrial Visit to High Voltage Laboratory, IISc., Bangalore, was organized by the Department of Electrical & Electronics Engineering, on 23th August 2019, for the 7th semester students of the Department. 40 students visited the lab, accompanied by faculty members, Dr. Soumya Mishra and Mrs. P. Mohana Latha.



Industrial visit to High voltage Lab, IISc, Bangalore: Final year EEE students along with faculty members during the industrial visit on 23rd August 2019

Dr. Satish L, Professor, High Voltage Engineering, IISc. Bangalore, explained the generation of 50Hz sine wave from the generating system, and its stepping up through the transformer, which is in cascaded form, to generate a high voltage. On the top of the transformer, a corona shield is placed to avoid a corona effect. How the corona is avoided by spindle wheel and needles, and the mechanism of torque production were also demonstrated.



Industrial visit to High voltage Lab , IISc,Bangalore: High voltage facility at IISc,Bangalore

The generation of high impulse voltage by connecting the capacitors in series, was then explained to the students. Sphere gap mechanism, the connection of capacitors in parallel, and the effect of charging and discharging when a large amount of current is passed through the metallic strip – students understood these concepts also, after a detailed explanation by Dr. Satish.

Outcome of the Event:

- 1) Students understood the method to eliminate the corona effect.
- 2) Students gained clarity on the generation of impulse voltage.