

SREE VIDYANIKETHAN ENGINEERING COLLEGE
(Autonomous)

Sree Sainath Nagar, A. Rangampet – 517 102

Department of Electronics and Communication Engineering

Report on Guest Lecture

The Guest lecture held in the Department of ECE, Sree Vidyanikethan Engineering College on 19th February 2016 on Electromagnetic Field Theory & Transmission Lines (EMTL). The lecture delivered by Dr.Balamathi Choudary, Scientist, CSIR-NAL on the following concepts to II ECE students.

- Three Coordinate Systems & Eleven Coordinate Systems
- Different Laws
- How coordinate system related to Electromagnetics
- Each coordinate system in detail
- Different applications for each coordinate system
- Conversion of Coordinate systems
- Discussion on Divergence and Curl
- Basics of Electromagnetics
- Introduction to EM Fields like Electrostatics, Magnetostatics, and Electromagnetics
- Driving laws of Electromagnetics
- Concept of Fields with real time examples
- Scalar, vector and Tensors
- Fundamental vector field quantities in Electromagnetics
- Universal Concepts and relations in Electromagnetics
- Maxwell's theory
- Production of an Electric wave and an alternating Magnetic field
- A magnetic wave generation
- In detail Four Maxwell's equations
- Given three real time problems as assignment to students and get solution after lunch
- Discussed in detail Electromagnetics Applications like Antennas and Radars

Finally, concluded the session by open discussion with students.

Some of the photographs while delivering the lecture are as follows:

