**MOTHER TERESA **

**INSTITUTE OF SCIENCE AND TECHNOLOGY**

**Approved by AICTE, Govt. of Telangana ,Affiliated to JNTUH & SBTET, Hyderabad**

**Recognition under Section 2(f) & 12 (B) of the UGC Act, 1956**

**SANKETIKA NAGAR, KOTHURU (V), SATHUPALLY – 507303, KHAMMAM Dist., TELANGANA**

**Phone : 9494641251, Email ID : info@mistech.ac.in**

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**ACADEMIC YEAR: 2018-19**

**A SUMMARY REPORT**

**Course name:**  Conducted a guest lecture on EM Waves and Applications

**Name of the Resource Person:** Dr. D.Dayakara Rao

**Gap Identified:** Required Knowledge on Spherical, cylindrical and Cartesian coordinate systems vector conversions

**No. of Students attended: 37**

Summary: On the day of the session (i.e **06-02-2019)** Dr. D.Dayakara Rao delivered a lecture on, EM Waves and Applications. Electromagnetic waves are also known as EM waves. Electromagnetic radiations are composed of electromagnetic waves that are produced when an electric field comes in contact with the magnetic field. It can also be said that electromagnetic waves are the composition of oscillating electric and magnetic fields. Electromagnetic waves are solutions of [Maxwell’s equations](https://byjus.com/physics/maxwells-equations/), which are the fundamental equations of electrodynamics.

**Applications of Electromagnetic Waves**

 Following are a few applications of electromagnetic waves:

* Electromagnetic radiations can transmit energy in a vacuum or using no medium at all.
* Electromagnetic waves play an important role in communication technology.
* Electromagnetic waves are used in RADARS.
* UV rays are used to detect forged bank notes. Real banknotes don’t turn fluorescent under UV light.
* Infrared radiation is used for night vision and is used in security cameras.