

## A Guest Lecture on “Antennas and its Applications in Electromagnetics for IOT & 5G Communications”

**Organized by** : Electronics & Communication Engineering  
**Name of the Resource Person** : Dr. Yuvraj. S  
**Designation** : Assistant Prof  
**Topic** : Recent Trends on Antennas and its Applications in Electromagnetics for IOT & 5G Communications  
**Venue** : VI 203  
**Date** : 18.11.2022

Branch	Year	Semester	No of Students Attended
ECE	III	I	180
Total No of Students Attended			180

### Report

#### 1. Report in brief by Organizer / Coordinator / Convener:

The Department of Electronics and Communication Engineering of Ramachandra College of Engineering conducted a guest lecture on **Recent Trends on Antennas and its Applications in Electromagnetics for IOT & 5G Communications** 18th Nov 2022.

This workshop focussed on Antenna research and its design, after the development of simulation software like HFSS, CST etc. Some interesting topics on which current research is going on in this domain are Metamaterial inspired antenna, Electromagnetic Band-gap Structure based antenna, lens antenna. Characteristics mode analysis was done for different structures like CMA Antenna based on Fabry-Perot cavity, Low Temperature Co-fired Ceramic technology-based antenna and Antenna based on Surface Integrated Non-Radiative Dielectric Waveguide.

The inaugural function started with the coordinator **Dr.J. Prasanth Kumar** explained the importance of the topic and improving the knowledge in this domain. The Chief Guest of the function was **Dr. Yuvaraj.S Professor, Department of ECE, National Institute of Technology, A.P**, who is resource person for this Event. Special guest **Dr. M. Muralidhara Rao**, who is Principal of Ramachandra College of Engineering, **Dr. S. S. Sarma**, Dean Academics and **Dr. L. Bharathi HoD – ECE**. Convener gave an introductory address about professional societies and their importance.

The resource person for the event **Dr. Yuvraj.S, Professor, Department of ECE, National Institute of Technology, A.P**, delivered a lecture on 'Fundamentals of Radiation and Basic parameters of Antenna and various applications in electromagnetics for IOT and 5G communications. The students acquired knowledge about basic design of Antennas and Recent trends in its design for 5G and 6G and beyond Applications by using techniques like Metamaterial Surfaces and Substrate Integrated Waveguides (SIW) and Frequency Selective Surfaces (FSS) and also touched the research going in sensors and terahertz frequency communications used for Defence applications

## Inaugural Session



### Students Participating Guest lecture



### Felicitation to the Resource Person



### Remarks of the programme:

Guest lecture on Antennas was successfully conducted on 18<sup>th</sup> Nov 2022 with 180 students with 20 faculty members. The students & faculty member have acquired technical knowledge on recent trends and electromagnetics for IOT and 5G communication. Student & faculty members who attended this program they felt very happy & they requested the coordinator to arrange this kind of event in the forth coming semester.

Coordinator

HOD

Dean Academics

Principal