



Applied Electromagnetism and Modern Antenna Design and Patent Rights

The second technical talk conducted on **11thSeptember 2018** was delivered by **Dr. Krishnamoorthy K**, Asst. Prof., Dept. of ECE, NITK Suratkal on the topic “**Applied Electromagnetism and Modern Antenna Design and Patent Rights**”. The formal inaugural function was graced by the presence of Dr. Richard Pinto.



Welcoming resource person for the talk



Resource person Addressing gathering



Dr. Krishnamoorthy has pursued M.E from the College of Engg., Guindy and Ph.D from IIT-Bombay. He has carried out enormous research work in the area of Modern Antenna Design and published various technical papers in reputed journals such as IEEE Transactions. Currently, two significant funded projects are carried out, granted by sponsoring agency SERB-DST India and ISRO India costing 60 Lakhs. Dr. Krishnamoorthy began the talk by familiarizing the audience with the principles of Electromagnetism and laws governing the antenna wave propagation. The talk proceeded to explain the design and working principles of monopole, dipole and horn antennas. The expert also stressed about parameters effecting wireless transmission such as Interference and others key factors which has to be considered during antenna design. Later, the talk elaborated on modern antennas like micro strip patch antennas which are well-known for their performance and extent of usage.



Question and answer session by resource person

He mentioned the advantages of patch antennas in wide range communication and how it took over the usage of conventional antennas in applications such as global positing satellites, cellular phones, personal communication system and also mentioned about patents under this area. Also gave an insight of how to file the patents. Finally, the expert briefed on the research facilities and dedicated laboratories available for microwave communication in NITK campus and also



explained about the internship program which our students interested to work in this niche area can undergo. The talk concluded by presenting a memento to the guest by Dr. Pinto.

Outcome:

- Students got the knowledge on applied electromagnetism and its application
- Students got knowledge on Antenna Design using different tool
- Students were enlighten about the research area about antenna design and its patent writes


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