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|  | **National Institute of Technology,**  **Tiruchirappalli – 620 015** |  |

**15.06.2020**

**IEEE Student Branch Activity Report for June 2020 – Technical Talk by Dr. Chinmoy Saha on 15.06.2020**

The IEEE Student Branch of NIT-Tiruchirappalli in association with IEEE-MTTS chapter organized a technical talk via WebEx Meetings on “Engineering Electromagnetics: Concept, Methodology and Techniques for High Impact Learning and Teaching” by Dr. Chinmoy Saha, Associate Professor, Department of Avionics, Indian Institute of Space Science and Technology, Thiruvananthapuram. A registration form was created for the event, using which participants registered their basic details. Meeting link was shared with the registered participants.

Dr. Saha started the session by offering a glimpse into his research activities which included antennas for cognitive radio applications, photoconductive antenna and dielectric resonator based wireless power transfer among others. Dr. Saha then moved on to the central topic of the session - teaching electromagnetics in a more effective way. He first gave a brief demonstration of the conventional ‘chalk and talk’ technique that involved lengthy mathematical derivations with little physical insight. To overcome the ineffectiveness of this technique, Dr. Saha proposed using graphic aids for better visualization, involving programming exercises to take advantage of students’ interest in coding and demonstrating relevant hardware components available in the labs. The superiority of the second technique was demonstrated with the help of case studies on popular topics in Electromagnetics like Rectangular waveguide, Circular waveguide, Dielectric Resonator and Circular Polarization. Each of these topics was presented with animations to enable a faster, easier and more intuitive grasp on the subject. The technical talk was attended by UG, PG and Ph.D. scholars from CSE, EEE and ECE departments of NIT Tiruchirappalli.

**Technical talk's video can be found in the link:**

[**https://drive.google.com/drive/folders/1ga-gIs4ym0UXdxkzjJk4oHS7zgZPkQlv**](https://drive.google.com/drive/folders/1ga-gIs4ym0UXdxkzjJk4oHS7zgZPkQlv)