

ACTIVITY REPORT (DCMCA-2020)

Three days "Hands-on training workshop (DCMCA-2020)" on Design and characterization of microwave components and antennas was conducted under the aegis of IEEE-APS and Jyoti Electronics by TIET, Patiala from Feb 22-24, 2020.

The aim for DCMCA-2020 was to cover a wide variety of topics such as:

- Fundamentals of EM simulator CST Microwave Studio
- Designing of transmission lines (e.g. coaxial line, microstrip line, CPW line, etc.)
- Designing of Waveguide/Directional coupler/ power divider MIMO antennas and calculation of various diversity parameters SAR analysis of mobile phone antennas
- Metamaterial Metasurface based Microwave Absorbers Antennas for RFID application
- Fabrication and measurement

Conference was conducted at TIET Patiala.

Day 1:

It included tutorials by Dr Rajesh Khanna, Professor, ECED, TIET on "Current trends in antenna research" and by Mr. Karthik Goyal, Application Engineer, Jyoti Electronics on "CST Microwave Studio regarding Design and optimization of patch antennas using using CST MWS".

After inauguration, conference started with different sessions, the schedule was divided into various sessions which included demonstration in antenna and microwave lab

Day2:

It included tutorials by Dr Harishankar Singh, assistant Professor, ECED, TIET on "Challenges of MIMO antennas for various portable devices" and by Mr. Karthik Goyal, Application Engineer, Jyoti Electronics on "extraction of electrical circuit parameter using CST MWS".

Day3:

It included tutorials by Dr Mayank Aggarwal, assistant Professor, ECED, TIET on "metamaterial ad its use for antenna design performance" and by Mr. Karthik Goyal, Application Engineer, Jyoti Electronics on "design and analysis of substrate integrated waveguide/directional coupler using CST MWS".

There were 23 participants from different parts of the countries including Jammu, Himachal Pradesh, and Raipur etc

Overall this workshop provided an insight to both theoretical and practical knowledge for the design, analysis, and operation of state-of-the art antenna design techniques using CST microwave studio.



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