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Department of Electronics & Communication Engineering
Session 2024-25

Content Beyond Syllabus

Title of the Activity: Content Beyond Syllabus ((Comparative Study: Monopole, Dipole, and Microstrip Patch Antennas)

Date/Time/Venue: 05/09/2024 / 10:30 AM / VII-SEM Class room

Name of the Faculty: Ms S. S. Dhanvijay

Resources used: PowerPoint Presentation

Students Participants : 47

Relevance to POs: PO1, PO2, PO3, PO5, PO10, PO12, PSO2

Brief Description of Activity: The objective of the session was to provide students with practical knowledge about real-world antenna structures beyond the academic curriculum. Key aspects such as radiation patterns, gain, physical size (form factor), and frequency of operation were discussed in detail. The session compared the traditional **Dipole** (used in FM/TV), the **Monopole** (used in automotive/handheld radios), and the modern **Microstrip Patch Antenna** (used in smartphones and aircraft). This helped students understand why specific shapes are chosen for different consumer electronics.

Outcome: Students understood the key architectural and performance differences between these three fundamental antenna types. The session enhanced their ability to relate theoretical electromagnetics with real-world wireless devices and improved their awareness of current industry trends in miniaturization.

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