## EVENT REPORT

Title of the Event: AICTE-ATAL One Week Faculty Development Program on "Wireless

Cognitive Radio Sensor Networks for Next Gen Communication Systems"

**Dates:** 9th September 2024 – 14th September 2024 **Organized by:** Dr. N. Srinivas & Dr. L. Adum Babu

**Department:** Electronics and Communication Engineering (ECE)

**Institution:** Marri Laxman Reddy Institute of Technology and Management (MLRITM)

The Department of Electronics and Communication Engineering at MLRITM successfully organized a one-week AICTE-ATAL Faculty Development Program on "Wireless Cognitive Radio Sensor Networks for Next Gen Communication Systems" from 9th to 14th September 2024. The FDP aimed to enhance the knowledge and teaching competencies of faculty members in the emerging areas of cognitive radio technologies and wireless sensor networks, which form the foundation of next-generation communication systems.

The program focused on advanced wireless communication techniques, spectrum sensing, dynamic spectrum access, energy-efficient sensor networks, and real-time communication challenges in cognitive radio environments. Expert resource persons from reputed institutions and industry delivered technical lectures covering both theoretical aspects and practical applications for 5G, IoT, and future communication standards.

Hands-on training sessions were conducted to provide exposure to simulation tools, network design, and cognitive framework implementation. The participants gained insights into network optimization, adaptive communication protocols, and efficient utilization of the radio spectrum critical components in modern wireless systems.

Throughout the FDP, faculty members had opportunities to engage in interactive sessions, problem-solving activities, and research-oriented discussions that encouraged collaborative learning. The workshop highlighted the significance of cognitive radio networks in addressing bandwidth scarcity and improving communication reliability in rapidly evolving digital ecosystems.

The event concluded with a valedictory ceremony, where certificates were presented to all participants. The organizing team expressed gratitude to AICTE-ATAL Academy, resource speakers, management, and the ECE faculty for their immense support in making the program a great success.

Overall, this FDP provided an excellent learning platform to explore innovations in wireless technologies and strengthened the research capabilities of the participants, aligning with MLRITM's mission to promote excellence in technical education and futuristic communication engineering.