

School of Engineering
Department of Electronics & Communication Engineering

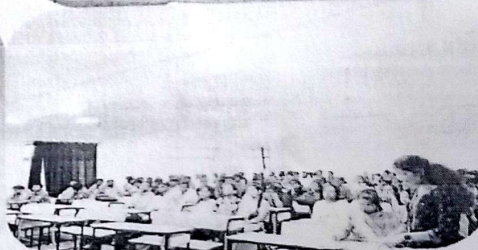
GUEST LECTURE REPORT

Guest Lecture was conducted by the department of ECE in association with NIKROS (NNRG Innovation Knights of ROboticS) club on 31-10-2025 from 2.00 PM to 4.00 PM. Guest Speaker Dr V Manju Latha, Research and Academic Coordinator, Soham Academy of Human Excellence, Hyderabad has taken a lecture on topic **“Ideas into Action: Your Future in Robotics, IoT & Automation”** for second year students in ECE Seminar Hall. She has delivered lectures in various organizations and Universities. Total of around 150 students and staff participated in this programme.

The speaker explains the powerful synergy between Robotics, the Internet of Things (IoT), and Automation, fundamentally driven by Artificial Intelligence (AI) and Machine Learning (ML).

The lecture also emphasized that these integrated technologies are not just futuristic concepts but are actively driving the Fourth Industrial Revolution (Industry 4.0) across numerous sectors. i.e. **Smart Manufacturing (Industry 4.0):** Robots and IoT enable smart factories through Robotic Process Automation (RPA), collaborative robots (Cobots), and predictive maintenance (sensors anticipating equipment failure), **Healthcare:** Applications include remote and precision surgery, patient monitoring via IoT wearables, and rehabilitation robots, **Logistics and Supply Chain:** Automation is key in warehouse management (picking, packing, and sorting robots), real-time tracking, and the rise of autonomous delivery vehicles and drones, **Smart Cities & Infrastructure:** Utilizing connected systems for smart traffic management, automated waste management, and enhanced surveillance/security and **Agriculture:** Precision farming uses IoT sensors for soil and crop health monitoring, while agricultural robots automate

The recent works on robotic projects handled by their team are discussed and finally research directions in the area of robotic technologies are shared with the participants. After her lecture the students were given time to interact with her. Students felt that the session was more informative and interactive. At the end of the guest lecture, few students gave their feedback, and explained how they were benefited.



Glimpses of Guest lecture

Dachan
NIKROS Coordinator

HoD