# EVENT REPORT

**Title of the Event:** One Week Faculty Development Program on "Next Generation Semiconductor Devices Modelling and Simulation"
**Dates:** 11th October 2021 – 16th October 2021
**Organized by:** Dr. N. Srinivas & Dr. G. Amanath
**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 conducted a One Week Faculty Development Program on "Next Generation Semiconductor Devices Modelling and Simulation" from 11th to 16th October 2021. This FDP aimed to train faculty members in advanced semiconductor device concepts and simulation techniques required for modern nanoelectronics and microchip fabrication technologies.

The technical sessions covered emerging semiconductor materials, MOSFET scaling challenges, multi-gate devices, FinFETs, TFETs, and wide-bandgap semiconductor applications. Distinguished resource persons from reputed academic institutions and semiconductor industries delivered expert lectures focusing on device physics, modelling methodologies, and the role of simulation in device performance prediction.

Hands-on workshops using industry-standard simulation tools provided participants with practical exposure to modelling advanced transistor structures, evaluating device characteristics, and analysing process variations. The FDP emphasized the importance of semiconductor technology in supporting high-performance processors, communication systems, and next-generation electronic products.

Throughout the program, participants actively engaged in interactive sessions, technical discussions, and collaborative problem-solving activities that enabled deeper understanding of advanced device behaviour and design optimization techniques. The FDP also encouraged faculty to integrate current semiconductor innovations into teaching and research to improve student readiness for the growing electronics industry.

The event concluded with certificate distribution during the valedictory ceremony. The organizers extended their sincere thanks to the management, resource speakers, organizing committee, and technical staff for their continuous support in the successful execution of the program.

Overall, this FDP significantly enhanced faculty proficiency in state-of-the-art semiconductor device technologies and strengthened the institute's mission of promoting academic excellence and industry-oriented skill development in the field of ECE.