

## Guest Lecture on Micro-Electro-Mechanical Systems (MEMS)

The department of ECE has conducted "Guest Lecture on Micro-Electro-Mechanical Systems (MEMS)" on 25/10/2018. Students of III B.Tech ECE students are participated in this guest lecture. The resource person was Dr.Sai Krishna Santhosh.G, Associate Professor, Department of ECE, KL Deemed to be University, Vijayawada.



In the first section, the students were introduced to MEMS, its definitions, history, current and potential applications, as well as the state of the MEMS market and issues concerning miniaturization. The second section deals with the fundamental fabrication methods of MEMS including photolithography, bulk micromachining, surface micromachining and high-aspect-ratio micromachining; assembly, system integration and packaging of MEMS devices is also described here. The third section reviews the range of MEMS sensors and actuators, the phenomena that can be sensed or acted upon with MEMS devices, and a brief description of the basic sensing and actuation mechanisms. The final section illustrates the challenges facing the MEMS industry for the commercialization and success of MEMS.

**He stressed on some Important New MEMS Applications** - The experience gained from these early MEMS applications has made it an enabling technology for new biomedical applications (often referred to as bioMEMS) and wireless communications comprised of both optical, also referred to as micro-opto-electro-mechanical systems (MOEMS), and radio frequency (RF) MEMS.

