

## KRISHNA COLLEGE ENGINEERING

## Department of Electronics and Communication Engineering

A Report on Guest Lecture by Prof. Sudhir Chandra, on

"Micro-electro-mechanical systems (MEMS)"

A Guest Lecture by Prof. Sudhir Chandra, Professor in IIT Delhi on "Microelectronics Fabrications Technologies and Micro-electro-mechanical systems (MEMS)" was delivered on 24<sup>th</sup> September, 2015 for 11:30 to 1:30 pm for the students of B-Tech (ECE).



He initiated his lecture session by briefing evolution of silicon wafers from tiny 12 mm diameter size to giant 12 inch diameter wafers which has revolutionized the IC manufacturing and all aspects of today's civilization have benefitted from this revolution. The speaker reported overview of various technological steps involved in integrated circuit fabrication. He lectured on the importance of MEMS in the upcoming technologies in the field of engineering.

After this session the speaker shows the wafers which he brought with himself from his laboratory, Centre for Applied Research in Electronics, IIT Delhi to the student in the batch of 10 students. The students interact with the speaker and asked some basic questions related to the wafers.



Later speaker narrated Micro-Electro-Mechanical-Systems (MEMS) which represent a class of devices which incorporate some miniaturized mechanical features or components in their design and operation and these could be a nozzle, cantilever, microbridge, diaphragm or such similar building blocks. The electronic functions may also be integrated along with mechanical parts on the same substrate or in a hybrid manner. He enlightened us that the MEMS evolved from the processes and techniques used in well established Integrated Circuit Industry, taking advantage of batch fabrication capability and ever increasing miniaturization.



The session went on by addressing important features of technologies used for MEMS. Through examples, a road-map for Academic Institutions to impart training to students was discussed.



He concluded the session by motivating the students to join research and explore the field of Micro-Electro-Mechanical-Systems (MEMS)

The lecture has proven to be very inspiring and informative for the students.

**Organised By:** Radhika Goel