MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY

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REPORT ON AN EXPERT TALK

ORGANISED BY DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

(Dated: 26-02-2018)

The Department of Electronics Engineering organized an expert talk on **"Effective Teaching Strategies to bridge gap between Industry and Academia"** for teaching/non-teaching staff of MSIT on Monday, 26th Feb, 2018. The lecture was highly factual and noteworthy. The talk was delivered by highly accomplished industry and academia expert – **Prof. Randhir Singh Malik (Technology Advisor IBM/Lenovo, North Carolina, USA and Former Prof. PEC, chandigarh**). Prof. Randhir Singh Malik has made outstanding and impactful contributions as professor at Punjab Engineering College, Chandigarh from 1967 to 1974. After higher studies from Columbia university, New York he worked at Bell Telephone Labs, Whippany, NJ, USA (1977 – 1984). In 1984, he was invited by IBM to join a newly formed group of talented engineers and scientists to improve the efficiency of the power systems to be used in large Mainframe Computers and Servers. In 2015, his Server division was acquired by Lenovo where his 50 years of experience is being used to impart knowledge to young engineers of 21st century. He has been granted **98 US patents** so far in various **fields of engineering.**

His lecture was focused on **Reasons for the Gap between Academia and the Industry**.

He discussed certain reasons such as:

1. Engineering curriculum not compatible with the needs of the Industry
2. Different Mindset - living in two different worlds
3. Pursuing different Goals: Academia pursuing recognition from peers while industry is struggling to survive.
4. Industry pursuing short range goals; Academia – long range perspective
5. Industry prefers proven solutions with little risk; Academia interested in creating solutions with no regard to time or cost.
6. Industry seeks simple solution to minimize the risk while Academia offers complex solution to maximize their recognition.
7. The industry is concerned with costs while Academia could care less about costs mainly concerned with prestige.

Later on he presented wonderfully the **Strategies to close the Gap between Academia and the Industry**

The main points are:

1. The Curriculum to be compatible with the needs of the Industry
2. Change of Mindset – The Academia should lay more emphasis on solving the problems – examination papers etc. – less emphasis on theory
3. Academia should think about helping the industry and the students
4. Every year the students should be assigned the projects to solve the problems the industry faces working closely with the industry.
5. Every Summer the students must be required to have internship in the industry with the help of the faculty.

6. The total marks distribution to be 35% of tests + 35% for projects + 30% for internship
7. 30% of the faculty must consist of the retired expert engineers from the industry (Designers, Manufacturing,, Quality engineers etc.)
8. The Academia must be encouraged to attend Industrial conferences and present the contacts made with the leaders in the industry.
9. The Academia should be recognized for completion and guiding the projects. Recognition by Cash Awards and informal Awards
10. Best performance awards based on Projects undertaken, Problems solved, and quality improved.
11. The engineering faculty to be allowed to work as consultants in the industry during summer breaks.

The faculty had series of questions and queries and the Q&A session with the participants was very interactive. The session was concluded with a thank you note by Prof. K.P. Chaudhary Director, MSIT.