

**Report on**  
**One day Industry based Educational Program -- under TEQIP 1.1.**  
**On**  
**Wireless & Cellular Communications –**  
**New Technological Developments**

**INTRODUCTION:**

A one day seminar on “Wireless & Cellular Communications – New Technological Developments” was held at the Department of Electronics & Communication Engineering of Narula Institute of Technology, under the patronage of JIS group on 23<sup>rd</sup> July 2012 .It is a Industry based Educational program under TEQIP phase II -1.1.



Arrival of Guests

This seminar based on Developments of Wireless and cellular communication. Where the advancement of cellular communication -1G to 4G was discussed by Dr M.H.Kori, Technology Consultant, Technology Advisor, Validus Technologies USA, Former Chairman, IETE Bangalore Centre, Retd Technical Director, Alcatel-Lucent Technologies. Through this program students were learn the modern scenario of wireless telecom and IEEE architecture & network in higher education aspect as well as industry. They got the chance to learn not only about the technology but also interact with the Speaker. The aim of this program was to create foundation for new

technological development of cellular communication, different wireless standards for budding engineer as well as faculty

### **SPEAKER PROFILE**



Dr. M.H.Kori holds Ph.D from IIT Bombay & has more than 35 years experience in Telecom & IT including research / teaching positions at Bangalore University, IIT Bombay, University of Duisburg and Industry positions like Head of Wireless Communication Division at C-DOT, Head of Telecom & Networking SBU at DSQ Software. He was the Technical Director at Alcatel-Lucent Technologies India involved in research & development in the area Wireless Communications. He was the Head of the Lucent Technologies Hyderabad R&D Unit earlier.

He is the Technology Advisor to Validus Technologies USA and also he is presently an independent Consultant & Advisor to some Organizations & Institutes.

His areas of interest include:

- a) Technology Innovation & its societal relevance, Technology Management, Technology knowledge dissemination.
- b) Wireless Communications including Mobile Cellular, Satellite and Personal Communication Systems.
- c) Microelectronics, Microwaves & MMICs.

A few of the other involvements include:

1. Has published and presented many papers in Journals & Conferences, has given large number of Invited Talks on Science & Technology in various Colleges and Universities and other Forums to disseminate and popularize it.
2. Member of Academic Councils of some Autonomous Institutes under VTU. Also member of VTU constituted Committee to evaluate VTU Autonomous Institutes.

3. He was the Conference Chair of the IETE Mid-Term Symposium on 'Telecom Paradigms – Indian Scenario'. He was the Conference Chair of the IETE Conference on RF & Wireless at RVCE (Oct 2011) and at SJGIT Chickballapur (Apr 2012).
4. He was visiting Fellow at the University of Duisburg, Germany.
5. Co-Author of book 'Networks Everywhere', CSIR Golden Jubilee Publications, 2003 and Contributing Editor of the book 'Milestones in Science and Technology', Navakarnataka Publishers 1994.
6. Co-editor of the 'Proceedings of International Conference on Emerging Microelectronics & Interconnection Technologies - EMIT '96 & EMIT '98.
7. Technical Program Committee Chairman, Co-Chairman, Conference Convener of several Conferences & Seminars organized by IEEE, IETE, IMAPS, etc.
8. Organizing Committee Chairman of International Radar Symposium India - IRSI 1999, 2001, 2003, 2005, 2007, 2009, 2011

Associated with several Professional Societies:

1. Past Chairman of the Institute of Electronics & Telecommunication Engineers (IETE), Bangalore Chapter (1998-2000). IETE Bangalore center received The Best Centre Award for two years under his Chairmanship. - Fellow IETE
2. Past Chairman of International Microelectronics & Packaging Society (IMAPS) India Chapter.
3. Past Vice Chairman of IEEE MTT & ED Society, India Chapter.
4. Executive Committee Member IEE.

## **SEMINAR COMMITTEE**

### **Chief Patron**

*Sardar Jodh Singhji , Chairman, JIS Group*

### **Patrons**

*Mr. Taranjit Singh, MD, JIS Group*

*Prof (Dr) Asit Guha, Director, JIS Group*

*Mr. U.S Mukherjee, Dy. Director, JIS Group*

### **Advisory Committee**

**Prof (Dr.) J.K. Das**, Principal, NIT

**Prof (Dr) J.K.Roy** , Dean(Academics)

**Prof (Dr) Amitava Das**, Dean(Research)

**Prof (Dr) P.K.Banerjee**, Advisor JIS Group

**Prof (Dr) A.K. Mallik** ,Professor, ECE Dept.

**Prof (Dr) J. Das**, Professor , ECE Dept

**Convener: Prof (Dr) M.R. Kanjilal**, Head , ECE Dept

**Joint convener: Mr. Anilesh Dey**, Asst. Prof. , ECE Dept.

**Program Committee:**

**Mr. Saradindu Panda**, Asst. Prof. , ECE Dept.  
**Mrs. Sangita Roy**, Asst. Prof. , ECE Dept.  
**Mr. Surajit Bari**, Asst. Prof. , ECE Dept.  
**Mr. Kaushik Sarkar**, Asst. Prof. , ECE Dept.  
**Mr. Pranab Hazra**, Asst. Prof. , ECE Dept.  
**Mrs. Arpita Barman Santra**, Asst. Prof. ,ECE Dept  
**Ms. Swati Banerjee**, Asst. Prof. ,ECE Dept  
**Mr. Soumen Pal**, Asst. Prof. , ECE Dept.  
**Mrs. Dola B. Gupta**, Asst. Prof. , ECE Dept.  
**Mrs. Sandhya Pattanayak**, Asst. Prof. , ECE Dept.  
**Mrs. Damayanti Ghosh**, Asst. Prof. , ECE Dept.  
**Mrs. Payel Biswas**, Asst. Prof. , ECE Dept.  
**Mrs. Arnima Das**, Asst. Prof. , ECE Dept.  
**Mr. Sohan Ghorai**, Asst. Prof. , ECE Dept.  
**Mr. Abhijit Ghosh**, Asst. Prof. , ECE Dept.  
**Mrs. Piyu Sarcar**, Asst. Prof. , ECE Dept.

**PARTICIPATION:** The Seminar was attended by 152 participants from 3rd year and 4th year B.Tech and M.Tech students, and faculty members of ECE,CSE ,IT and CA department

**PROGRAM SCHEDULE:**

<b>Technical Program</b>	
<b>Time</b>	<b>Event</b>
9.00A.M-9.30 A.M	Registration & Tea
9.30 A.M -10.00 A.M	Inauguration
10.00A.M-1.00 P.M	Session -I
1.00 P.M- 2.00 P.M	Lunch Break
2.00 P.M - 5.00 P.M	Session -II
5.00P.M-5.30 P.M	Valedictory session & Tea

**INAUGURAL SESSION:**

The program was glorified by the kind presence of Prof. (Dr.) Asit Guha, Director of JIS group; Prof. (Dr.) P.K.Banerjee,Advisor of JIS group; Prof.(Dr.) J.K.Das, Principal of NIT; Prof. (Dr.) J.K. Roy Dean(Academic) of NIT;Prof.(Dr) Amitava Das Dean(Research) of NIT. In opening session Professor (Dr) M.R. Kanjilal, HOD (ECE) welcomed the invitees and participants. Prof. (Dr.) Asit Guha, Director of JIS group appreciated the program organised by ECE dept; Current position of wireless communication as a research point of view was described

by Prof. (Dr.) P.K.Banerjee, Advisor of JIS group. Prof.(Dr.) J.K.Das, Principal of NIT said about our eminent speaker Dr M.H. Kori and his immanence work on Wireless technology; Prof. (Dr.) J.K. Roy Dean(Academic) of NIT appreciate TEQIP for funding this kind of resourceful seminar. Prof.(Dr) Amitava Das Dean(Research) of NIT in his speech emphasizes the importance of such a initiative in an educational institution which ultimately benefit the students as well as the faculty members.



Lighting The Lamp



Inaugural Session



Audience

### **TECHNICAL SESSION :**

#### **Session I**

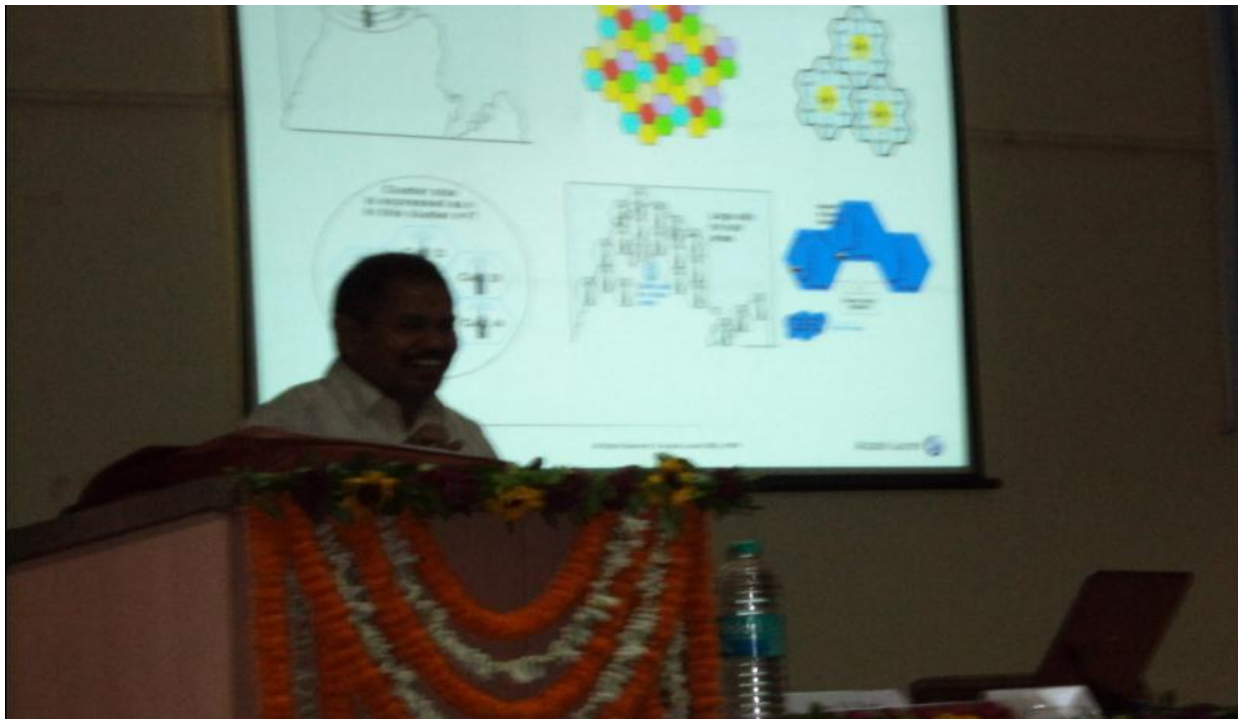
The Session I was chaired by Prof. Dr. P.K.Banerjee .Dr Kori delivered an excellent lecture right from the fundamentals of wireless and cellular communication to the latest developments in this field. The session covered the topics Introduction, Concepts & Standards, Communications Systems & Subsystems, Cellular Communications - 1G to 4G and beyond, Overviews of – GSM.



Session I was chaired by Prof P.K.Banerjee



Session I



Concepts of Cellular Communications

## Session II

Session II was chaired by Prof. Dr. A K Mallick .The session II was an elaborate discussion on CDMA, CDMA, EVDO, WCDMA, HSPA, LTE & LTE-Advanced ,

Wireless Standards – 802.11 – WiFi, 802.15 – PAN – Bluetooth, Zigbee, 802.16 – WiMAX, MIMO & Smart Antennas, RF Techniques and some new and interesting developments



Session II was chaired by Prof. Dr. A K Mallick



Interesting developments in Wireless Communication





Prof. Dr. A. K. Mallick and Prof. Dr. J. Das

**VALEDICTORY SESSION :**

The valedictory speech was given by our Principal Prof. Dr. J.K.Das. Memento was presented to Dr Kori as a mark of respect for his contribution to the field of Wireless communication.



Dr Kori Felicitated by Dr. J.K.Das, Principal, NIT.



A Team

**OUTCOME OF THE SEMINAR:**

Outcome of the One day Industry based Educational Programme -- under TEQIP 1.1. On Wireless & Cellular Communications – New Technological Developments organized by Narula Institute of Technology.

Through this programme, students who are the, future generation industry bound employee will be enlightened about the modern scenario of wireless telecom and IEEE architecture & network. This seminar on Wireless and Cellular communication will be of direct relevant to industry for the B.Tech and PG students . This in turn will help in placement opportunity and higher education. The topics discussed is of great benefit as the topics match the industry scenario and work domain. They will have a chance to learn not only about the technology but also interact with the Speaker.