

J. C. Bose University of Science and Technology, YMCA

5G Technology: Bridge to Future

Event Details: 3rd July 2021, 9.30 AM onwards

Organized by: Department of Computer Engineering and Department of Electronics Engineering in collaboration with National Telecommunications Institute for Policy, Research, Innovation and Training

Inaugural Ceremony

Guest of Honour at inaugural ceremony: **Lt. Gen. Dr. S. P.Kochar, Director General COAI**

Chief Guest at inaugural ceremony: **Sh. U. K. Srivastava, Sr. Deputy Director General NTIPRIT**

Valedictory Ceremony

Guest of Honour at Valedictory ceremony: **Sh. B. Sunil Kumar, TS officer, DoT, Govt. of India**

Chief Guest at Valedictory ceremony: **Sh. Shyam Prabhakar Mardikar, President Group CTO Mobility, Reliance Jio**

Participant Count: 250

Banner:



ONE DAY WEBINAR ON
5G TECHNOLOGY : BRIDGE TO FUTURE
 ORGANISED BY
J.C. BOSE UNIVERSITY OF SCIENCE AND TECHNOLOGY, YMCA, FARIDABAD
(Established by Haryana State Legislative Act No. 21 of 2000 & Recognized by UGC Act 1956 w/ 22 to Confer Degree)
ACCREDITED 'A' Grade by NAAC
 In collaboration with
NATIONAL TELECOMMUNICATIONS INSTITUTE FOR POLICY RESEARCH, INNOVATION AND TRAINING

Chief Guest



Sh. U.K. Srivastava
Sr. Deputy Director General
NTIPRIT

DATE : 3rd JULY 2021
TIME : 09:30 AM

Schedule:

Inaugural Session : 09:30 AM to 10:30 AM

Technical Session 1 : 10:30 AM to 11:30 AM
Topic: 5G- General overview, expected economic benefits of 5G, Timelines in India , EMF radiation and the myths
Speaker : Sh Anil Shandewaj, Advisor TRAI

Technical Session 2 : 11:30 AM to 12:30 PM
Topic: Evolution of Mobile Technologies to 4G and Beyond
Speaker : Sh Aastik Kumar, Director, NTIPRIT, DoT

Lunch Break : 12:30 AM to 02:50 PM

Technical Session 3 : 02:50 PM to 03:50 PM
Topic: 5G Network Slicing, Network Function Virtualization and Cloudification of 5G Network
Speaker : Sh Vivek Dixit, AIO

Technical Session 4 : 03:50 PM to 04:10 PM
Topic: 5G Security: why this is important than ever before?
Speaker : Mr Suresh Chawdhary Mts Nisak

Closing Ceremony and Vote of Thanks : 04:50PM to 05:30PM

Guest of Honour



Lt. Gen. Dr. S. P. Kochhar
Director General
COAI

Patron



Prof. Dinesh Kumar
Vice-Chancellor
JCRoEUST, YMCA

Co-Patron



Dr. S. K. Garg
Registrar
JCRoEUST, YMCA

<https://jcboseust.ac.in> Zoom Meeting : <https://us22web.zoom.us/j/3102995033?pwd=YTU3QkRlc0ZlZDQ4ZlYmSHJhYjYKd0RlUT09>
 Meeting ID : 310 299 5033
 Passcode : Tech30

Report of the Event

The Department of Computer Engineering and Department of Electronics Engineering in collaboration with National Telecommunications Institute for Policy, Research, Innovation and Training jointly organized one day Webinar on 5G Technology: Bridge to Future on 3rd July 2021. This event was attended by **250 participants** of undergraduate, post-graduate students, research scholars and faculty members. The objective of this event was to provide awareness of 5G Technology, its evolution and capabilities, benefits, EMF radiation and Myths, Quality of Service, Network Slicing and potential use case in India among participants.

Sh. U. K. Srivastava, Sr. Deputy Director General NTIPRIT was chief guest. **Lt. Gen. Dr. S. P. Kochhar**, Director General COAI was guest of honour along with Patron Hon'ble Vice chancellor **Prof. Dinesh Kumar** and Co-patron Worthy registrar **Dr. S. K. Garg**.

Sh. U. K. Srivastava, in his address, mentioned about importance of technology in today's fast-moving world. He added that Though the present time is quite challenging, still the nation is showing high spirits. With advancements in technology, we can surely overcome this tough time and take it as an opportunity to work together for the betterment of all humans.

Dr. S. P. Kochhar talked about the advancement of 5G with respect to the earlier technologies such as 3G, 4G etc. He also mentioned that 5G will change the current scenario of IoT .It will help in solving the issues of speed and connectivity of the devices.

Vice Chancellor Prof. Dinesh Kumar congratulated both the departments on successfully conducting the programme. He also motivated them to conduct such type of courses on Emerging Technologies. He encouraged participants to use newly learnt concepts in to their own research areas. He added that. The first science experiment with millimeter waves was conducted by Indian scientist Jagadish Chandra Bose. He conducted trials to measure different properties of materials, actually the same experiments we do today. It is a matter of pride for us that the name of such a great Indian scientist is associated with this university, which was a century ahead of his time.

Worthy registrar Dr. Sunil Kumar Garg conveyed his vote of thanks to all the delegates, resource persons, participants, Program Coordinators: **Prof. Komal Kumar Bhatia**, Dean & Chairperson, Computer Engineering Dept, **Prof. Munish Vashishath**, Electronics Engineering Dept, **Prof. Neelam Turk**, Chairperson, Electronics Engineering Dept, and organizing team members for making this event so successful.

During the valedictory ceremony, **Sh. Shyam Prabhakar Mardikar**, President Group CTO Mobility, Reliance Jio was chief guest. **Sh. B. Sunil Kumar**, TS officer, DoT, Govt. of India was guest of honour in the inaugural ceremony.

Sh. Shyam Prabhakar Mardikar mentioned in his address that 5G is more than a next-generation communication technology; it's a technology revolution that enables many innovative use cases, including Industry 4.0, Internet of Things (IoT), remote surgery and autonomous driving.

Sh. B. Sunil Kumar, in his address, briefed about the topics covered in the earlier sessions by the experts. He also talked about benefits of 5G in Indian market perspective and gave emphasize on collaboration with universities for the implementation of 5G for testing purpose.

In this event, five technical expert sessions were organized. The First session was taken by **Sh. Anil Kumar Bhardwaj**, Adviser (Broadcasting and Cable Services, TRAI). With the introduction of 5G technology, he mentioned about India's readiness to accept this change. He mentioned that 5G technology is simply not a usual update from 3G and 4G, rather it deals with higher things like AI, IoT, Machine Learning and more.

Technical expert for second session was **Sh Ashok Kumar**, Director NTIPRIT. He emphasized on evolution of 5G technology. He also discussed segregation of user plane and control plane in 5G technology which will significantly increase the network speeds.

In Session 3, **Sh. Vivek R Dixit, President**, Reliance Jio Infocomm Ltd focused on how virtualization started and the cloud of computing came into vision, deployment methods, Network slicing.

In session 4, **Sh. Vivek Dixit** from Ericsson briefed on the topic "X Haul requirement for 5G and Solutions". He discussed in detail the working of 2G, 3G and 4G network calls and the data path and the impact of on

fronthaul protocols. He presented an informative video explaining the transmission types and operator network evolution. Winding up the session he gave a quick explanation of SDN and showed a picture of real time equipment used in networking. It was indeed a very informative session.

In the 5th session, **Sh. Suresh Chowdhary** (Head of Security and Privacy Nokia) addressed the gathering on the topic “5G Security”. He started with the various security breaches around the globe and 5G security drivers explaining in detail the supply chain security risk covering up the minute details about the government and regulatory risk and risk mitigation.

All the technical sessions were very interactive and ended with clarification of participants doubts. During the valedictory ceremony, participants gave their feedback about content of the event. The event was convened by Dr. Parul Tomar and Dr. Sapna Gambhir.

Screenshots:





