

WEBINAR ON 5G TECHNOLOGY

DATE: 24TH FEB. 2022

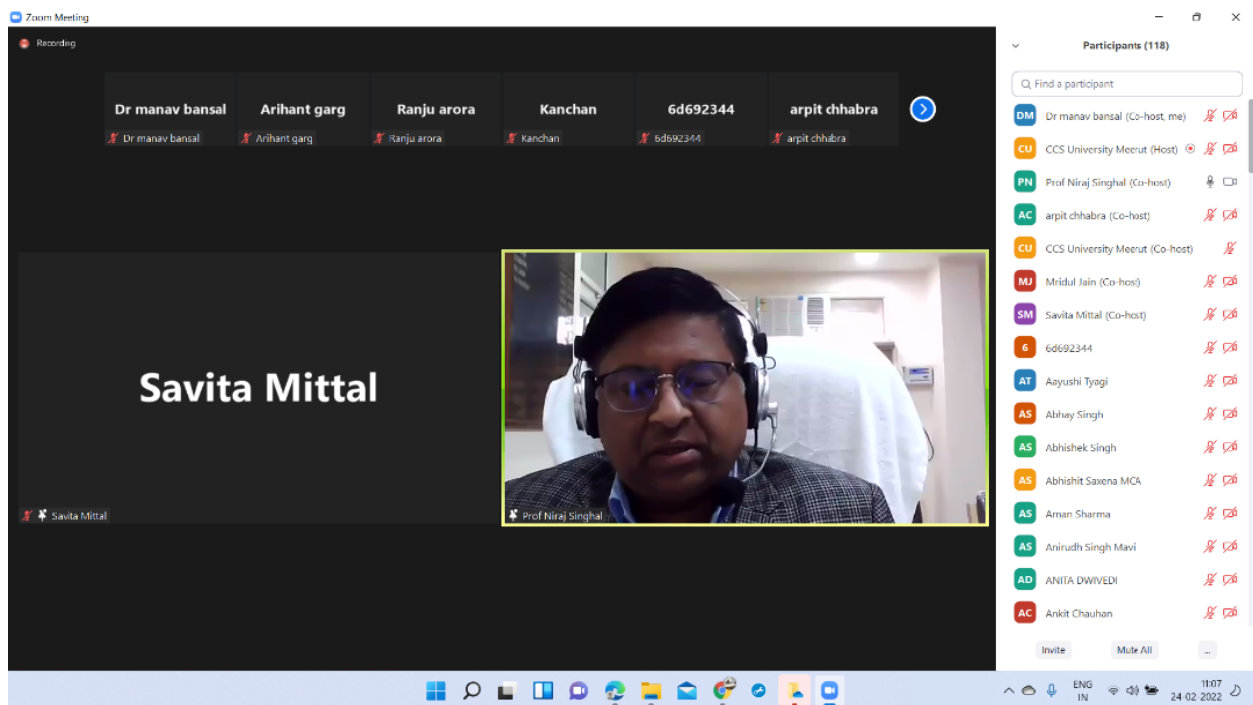
TIME: 11:00 A.M.- 1:30 P.M.

- First Webinar on “5G Technology” was organized by:
Ms. Savita Mittal,
Asstt. Professor, Deptt. of Computer Application, SCRJET.
- **Resource Person : Er. Mridul Jain**
Domain Sales Manager & Technical Solutions Architect(Ericsson , U.S.A)
- **Attended by :** attendees(Including Faculty Members , Students & Lab Staff):
On **Zoom** Platform:
On **youtube**:

Objectives:

To enhance the knowledge in field of 5g Technology in various dimensions, like- Scope, application areas, career opportunity, technology’s intricacies , future of 5G in India.

Related Pics:



Zoom Meeting

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Ericsson
140 Years of enabling communication

From copper wire to artificial intelligence

Fastest scaling technology ever

The 4th industrial revolution

Apps using your microphone: Zoom

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Global presence

Region	Employees
North America	9,4
Europe & Latin America	44,7
Middle East & Africa	4,2
South East Asia, Oceania & India	23,6
North East Asia	12,5

94,500 employees worldwide

55,000 of our employees are active within Services

23,600 of our employees are dedicated to R&D

X 1,000 employees

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Mridul Jain arpit chhabra Prof Niraj Singhal Savita Mittal 6d692344 Amit Sharma

Mobile telephony evolution - ETSI markets

1 st generation	2 nd generation	3 rd generation	4 th generation	5 th generation
Analogue speech	Digital speech + medium-rate data	High speed data, Multiple services, Quality	Higher speed data, PS only, Multiple services, Quality	Ultra High speed data, low latency, New use cases
1G	2G	3G	4G	5G
NMT450, NMT900, AMPS, TACS	GSM (voice), GPRS (packet), EDGE (packet +)	WCDMA (UMTS)	LTE	NR
1980	1990	2000	2010	2020

GSM - Global System for Mobile communication
 GPRS - General Packet Radio Services
 EDGE - Enhanced Data rates in GSM Evolution
 3GPP - 3rd Generation Partnership Program
 WCDMA - Wideband Code Division Multiple Access
 UMTS - Universal Mobile Telephony System

LTE - Long Term Evolution
NR - New Radio

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Mridul Jain arpit chhabra Savita Mittal Prof Niraj Singhal 6d692344 Amit Sharma

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.. so what is 5G?

Participants (144)

Find a participant

- AC arpit chhabra (Co-host, me)
- CU CCS University Meerut (Host)
- MJ Mridul Jain (Co-host)
- CU CCS University Meerut (Co-host)
- DM Dr manav bansal (Co-host)
- PN Prof Niraj Singhal (Co-host)
- SM Savita Mittal (Co-host)
- 6 6d692344
- A Aanchal
- AT Aayushi Tyagi
- AS Abdul Salam
- AS Abhay Singh
- AS Abhishek Singh
- AS Abhishek Saxena MCA
- AU Ajay Upadhyay
- AR ALOK RAJPUT

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Prof Niraj Singhal 6d692344 Lucky Tyagi

Mridul Jain arpit chhabra Savita Mittal Prof Niraj Singhal 6d692344 Lucky Tyagi

Spectrum trade-offs between capacity, coverage and latency

It all begins with Frequency and Wavelength
The frequency of a wave is inversely proportional to its wavelength
 That means that waves with a high frequency have a short wavelength
 That means low frequency signal can penetrate and travel further

Coverage Capacity Latency

High bands
(24 GHz - 40 GHz)
New

Mid bands II
(3.5 GHz - 6 GHz)
New

Mid bands I
(1 GHz - 2.6 GHz)
Legacy

Low bands
(Sub - 1 GHz)
New/Legacy

Urban High Ultra-Low

Wide Area Regional Moderate Low

High capacity dense urban / localized deployments

Moderate capacity wide area / outside-in coverage

Participants (138)

Find a participant

AC arpit chhabra (Co-host, me) [Mute] [Unmute]

CU CCS University Meerut (Host) [Mute] [Unmute]

MJ Mridul Jain (Co-host) [Mute] [Unmute]

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DM Dr manav bansal (Co-host) [Mute] [Unmute]

PH Prof Niraj Singhal (Co-host) [Mute] [Unmute]

SM Savita Mittal (Co-host) [Mute] [Unmute]

6 6d692344 [Mute] [Unmute]

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AT Aayushi Tyagi [Mute] [Unmute]

AS Abdul Salam [Mute] [Unmute]

AS Abhay sharma [Mute] [Unmute]

AS Abhishek Sharma [Mute] [Unmute]

AS Abhishek Singh [Mute] [Unmute]

AS Abhishek Saxena MCA [Mute] [Unmute]

AR ALOK RAJPUT [Mute] [Unmute]

Invite Mute All

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Jaimala Bishnoi Begraj tyagi DR C P SINGH

Mridul Jain arpit chhabra Savita Mittal Jaimala Bishnoi Begraj tyagi DR C P SINGH

The 5G Revolution creates endless possibilities

5 Technology trends

1. The realization of Zero Touch
2. The emergence of the Internet of Skills
3. Highly adaptable cyber-physical systems
4. Trust technologies for security assurance
5. Ubiquitous, high capacity radio

Automotive
Smart vehicles

Energy & Utilities
Metering & Smart cards

Transport
Smart vehicles, transport

Mining
Critical control of remote devices

Health care
Remote diagnosis & surgery

Manufacturing
Infrastructure, monitor & control

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AS Abhishek Singh [Mute] [Unmute]

AS Abhishek Saxena MCA [Mute] [Unmute]

AS Aman Sharma [Mute] [Unmute]

AR Amit kumar [Mute] [Unmute]

AS Amit Sharma [Mute] [Unmute]

AS Anirudh Singh Mavi [Mute] [Unmute]


Invite Mute All







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What will 5G bring?

One network supporting multiple use cases and industries



10-100x End user data rates 	1000x Mobile data volumes 	100x More devices 	Cost Device reduc
10+ Years battery life 	+20dB Better coverage 	5x Lower latency 	If "big data new oil of t digital era, 5G is the ne of pipes tha deliver it

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Image Video: Connect future "The world connected by 5G" (long version)



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So....what do you think

Where do you want to be with 5G...

Mridul Jain

Dr manav bansal

Dr manav bansal

Savita Mittal

Jaimala Bishnoi

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Dr manav bansal

Jaimala Bishnoi

arpit dhabra

Himanshi Ahla...

Begraj tyagi

DR C P SINGH

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- AS Aman Sharma
- AK Amit kumar
- AS Amit Sharma
- AS Anirudh Singh Mavi

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5जी से आएगी क्रांति

मेरठ। सर छोटूराम अभियांत्रिकी एवं तकनीकी संस्थान में 5जी टेक्नोलॉजी विषय पर वेबिनार का आयोजन किया गया। यूएसए के इंजीनियर मृदुल जैन ने कहा कि 5जी को तकनीक में क्रांति बताते हुए कहा कि इसमें पार संभावनाएं हैं। उन्होंने आटोमेशन, बिग डाटा, वेवलेंथ और 3 जीपीपी को रोचक जापानी वीडियो के माध्यम से जानकारी दी। संस्थान के निदेशक प्रो. नीरज सिंघल ने अतिथियों का स्वागत किया। कार्यक्रम संयोजिका सविता मित्तल ने विषय की जानकारी प्रदान की। इं. प्रियंक सिरोही, अर्पित छाबड़ा, डॉ. मानव बंसल, डॉ. पंकज, डॉ. विकास, डॉ. शशि, डॉ. वंदना, निधि भाटिया, रितु मौजूद रहीं। ब्यूरो

Press Coverage(Amar Ujala)

मोबाइल के क्षेत्र में क्रांति है 5-जी

मेरठ। सर छोटूराम इंजीनियरिंग कॉलेज में 5-जी तकनीकी पर हुई वेबिनार में विशेषज्ञों ने इसके लाभ को समझाया। शुभारम्भ निदेशक प्रो. नीरज सिंघल ने किया। संयोजिका सविता मित्तल ने विषय की जानकारी प्रस्तुत की। मृदुल जैन ने कहा कि 5-जी तकनीक में अपार सम्भावनाएं हैं। इसके उपयोग से ऑटोमेशन, बिग डाटा, आर्टिफिशियल इंटेलीजेन्स, वेवलेन्थ में क्रांतिकारी बदलाव आएगा। प्रियांक सिरोही, अर्पित छाबड़ा, डॉ. मानव बंसल, डॉ. पंकज, डॉ. विकास, डॉ. शशि, डॉ. वंदना, निधि भाटिया, रित शर्मा, दीप्ती सिंघल, पटिया शर्मा

Press Coverage(Hindustan Times)