

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**Guest Lecture**

**on**

**“Modern Trends of Communication”**

***By Sri. P. Kalee Prasad, Senior Engineer, Doordarshan, Vijayawada***

**20 May, 2021**

The Department of Electronics and Communication Engineering has organized a Guest Lecture entitled “Modern Trends of Communication” on 20<sup>th</sup> May, 2021. The target audiences are the faculty and students of II B.Tech – ECE of Sree Vidyanikethan Engineering College, Tirupati.

The lecture started with the essence of the requirement of modulation. The speaker has stressed upon the requirement of data, signals and which in turn perceived as information are sent from one location to another in fraction of seconds in the current day. This is possible with the rapid development in the field of Electronics and Communication Engineering. Earlier systems use analog modulation that allows the message signal to be propagated over longer distances. But these systems tend to be vulnerable to noise. Hence, with the developments in field of communications the new era of Digital conversion from Analog has evolved. Further, drawback on analog based communication systems are discussed paving way to digital communications.

The speaker has stressed upon the usage and need for satellite communications. A communications satellite is an artificial satellite that relays and amplifies radio telecommunication signals via a transponder; it creates a communication channel between a source transmitter and a receiver at different locations on Earth. Communications satellites are used for television, telephone, radio, internet, and military applications. Further, the effect of environment on the satellite communications is discussed.

The concepts of Non-LOS(NLOS) and beyond-LOS(BLOS) are the main highlights of the lecture that has motivated the entire stream of audience. These are the two main cases of propagation that are successfully deployed to provide robust and secure link. Further, highlighting on the requirement of wireless communications, the lecture ended with the introduction to the basics of cellular communications and a questionnaire from the students is dealt at the last.

77 students of II B.Tech – ECE have attended the lecture. Dr. V. V. Satyanarayana Tallapragada, Associate Professor organized this event under the guidance of Dr. N. Gireesh, Professor and Head, Department of Electronics and Communication Engineering.

The session ended with the oral feedback from the participants. All the participants have commended the lecture and has given a positive feedback. The screenshots of the session are as follows:

Meet - agg-sgns-vnw - Brave  
meet.google.com/agg-sgns-vnw?authuser=0

kalee prasad is presenting

Pintu Raj Rauniyar and 59 more

09:38

**MODERN TRENDS IN COMMUNICATIONS AND BROADCASTING**  
PAMMI KALEE PRASAD  
M.TECH(IIT-K)  
Member, Institution of Engineers  
Hon. Secretary IETE  
Semiconductor Society of India  
Broadcast Engineering Society of India  
INDIRA REHABILITATION CENTER - SCHOOL FOR METALLICALLY CHALLENGED CHILDREN

Meeting details

kalee prasad is presenting

Search

Meet - agg-sgns-vnw - Brave  
meet.google.com/agg-sgns-vnw?authuser=0

kalee prasad is presenting

Venkata Munire... and 62 more

09:39

**Communication System Architecture**

Meeting details

kalee prasad is presenting

Search

Meet - agg-sgns-vnw - Brave  
meet.google.com/agg-sgns-vnw?authuser=0

kalee prasad is presenting

Meeting details

(73)

Add people

IN CALL

- SATYANARAYANA... (You)
- Akhila Bhushan
- Ashritha Mannuru
- bathala reddiprasanna
- be happy
- Chandu M

Information Sources:

- 1.VOICE
- 2.PICTURE
- 3.TEXT
- 4.SECRET INFORMATION
5. WHAT NOT.....

Meeting details ^

Windows taskbar: Search, File Explorer, Edge, Brave, W, 09:43 20-05-2021

Meet - agg-sgns-vnw - Brave  
meet.google.com/agg-sgns-vnw?authuser=0

kalee prasad is presenting

Meeting details

(75)

Add people

IN CALL

- SATYANARAYANA... (You)
- Akhila Bhushan
- Ashritha Mannuru
- bathala reddiprasanna
- be happy
- Chandu M

Information Sources:

- 1.VOICE
- 2.PICTURE
- 3.TEXT
- 4.SECRET INFORMATION
5. WHAT NOT.....

Meeting details ^

Windows taskbar: Search, File Explorer, Edge, Brave, W, 09:44 20-05-2021

Meet - agg-sgns-vnw - Brave

meet.google.com/agg-sgns-vnw?authuser=0

kalee prasad is presenting

The electromagnetic spectrum gives an overview of all electromagnetic radiation. Photo: www.ahso

Meeting details

(73)

Add people

IN CALL

- SATYANARAYANA... (You)
- Ashritha Mannuru
- bathala reddiprasanna
- be happy
- Chanti Hussain
- Deekshitha Limbakar

Meeting details

09:49  
20-05-2021

Meet - agg-sgns-vnw - Brave

meet.google.com/agg-sgns-vnw?authuser=0

kalee prasad is presenting

Frequency band	Wavelength	Frequency	Energy
Radio waves	> 1 m	< 300 MHz	< 1.24 µeV
Micro-waves	1 m - 100 µm	300 MHz - 300 GHz	1.24 µeV - 124 eV
Infrared	1000 µm - 700 nm	300 GHz - 430 THz	124 eV - 1.74 eV
Visible light	700 nm - 400 nm	430 THz - 750 THz	1.74 eV - 3.11 eV
Ultraviolet	400 nm - 10 nm	750 THz - 30 PHz	3.11 eV - 124 keV
X-rays	10 nm - 0.01 nm	30 PHz - 30 EHz	124 keV - 124 MeV
Gamma rays	< 0.01 nm	> 30 EHz	> 124 MeV

Meeting details

(77)

Add people

IN CALL

- SATYANARAYANA... (You)
- Ashritha Mannuru
- bathala reddiprasanna
- be happy
- Chandu Chandrika
- Chanti Hussain

Meeting details

09:53  
20-05-2021

Meet - agg-sgns-vnw - Brave  
meet.google.com/agg-sgns-vnw?authuser=0

kalee prasad is presenting

VishnuPriya Malli... and 68 more

10:02

Can we transport information with out noise .  
Noise is the main source for transportation.  
Any channel depends on the noise level at the source & receiver.  
Hence channels are classified or designed according to noise levels

Meeting details ^

Turn on microphone (CTRL + D)

Windows taskbar: Search, File Explorer, Edge, Teams, OneDrive, 10:02 20-05-2021

Meet - agg-sgns-vnw - Brave  
meet.google.com/agg-sgns-vnw?authuser=0

kalee prasad is presenting

Saiabhishek Kut... and 60 more

10:21

A satellite in a high-altitude, geostationary orbit circles the Earth once every 24 hours. The same amount of time it takes for the Earth to spin on its axis. The satellite turns eastward (like our Earth) along the Equator. It stays above the same point on Earth all the time.

Meeting details ^

Windows taskbar: Search, File Explorer, Edge, Teams, OneDrive, 10:21 20-05-2021

**Coordinator**  
**Dr. V. V. Satyanarayana T**  
Associate Professor