

IEEE - MVSR STUDENT BRANCH

Student Branch Code: 12161, School Code: 41329276



A WEBINAR ON SATELLITE LINK BUDGET

IEEE MVSR CASS Student chapter has conducted a webinar on Satellite Link Budget on 31st January 2021. The session was very interactive as most of the students were curious to know about the satellite link budget.

Student Branch Mentor:

Dr. Atul Negi, Professor, School of CIS, University of Hyderabad

Student Branch Advisor:

Dr. G. Kanaka Durga, Principal and Professor, MVSR Engineering College.

Student Branch Counsellor:

Dr. D. Hari Krishna, Associate Professor, EEE Dept., MVSR Engineering College.

Student Branch Executive Committee:

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WIE Affinity Group Advisor:

Mrs. A. Vijaya Vahini, Assistant Professor, IT Dept., MVSR Engineering College.

PES Student Chapter Advisor:

Dr. D. Hari Krishna, Associate Professor, EEE Dept., MVSR Engineering College.

CS Student Chapter advisor:

Mrs. B. Saritha Associate Professor, CSE Dept., MVSR Engineering College.

CASS Student Chapter Advisor:

Mrs. S. Aruna Assistant Professor, ECE Dept., MVSR Engineering College.

Computer Society:

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& Content Writing Ms. K. Laxmi Priya

Session details:

Date: 31st January, 2021. **Time:** 05:00pm - 07:00pm. No. of participants: 45

Speaker for the session: Mrs. Radha Nayani, Engineer 'SG' NRSC/ ISRO. She is responsible for calibration of payload sensors, payload projects in the Rohini Sounding Rockets Payload Project. She Designed and developed the RF and Base band sub-systems in Data Reception chain at Earth Sub-station, Shadnagar. She headed the Automation Systems Division and held responsibilities in projects like Ocean -3/3A and GISAT projects

Ms. Pranitha Harani, Vice Chair, IEEE MVSR CASS has started the meeting by welcoming the speaker Mrs. Radha Nayani, Dr. D. Hari Krishna, Student Branch Counsellor, IEEE MVSR SB, Mrs. S. Aruna, Student Chapter Advisor, IEEE MVSR CASS, faculty members, ExCom and all the attendees.

Then, Dr. D. Hari Krishna addressed the gathering and spoke about the IEEE MVSR SB and shared it's activities to speaker.

Then, Mrs. S. Aruna, Student Chapter Advisor, IEEE MVSR CASS has addressed the gathering, spoke about the agenda of the meeting and thanked the speaker for her time and interest towards the webinar.







IEEE MVSRSB CASS STUDENT CHAPTER Presents a

Webinar on





Satellite link Budget

Date: 31 January 2021 | 5:00 PM-7:00 PM IST



Speaker:



Radha Nayani Engineer - 'SG' NRSC / ISRO Head of Automation Systems Divisions Prime responsibility-Calibration of payload sensors, integration of payload packages

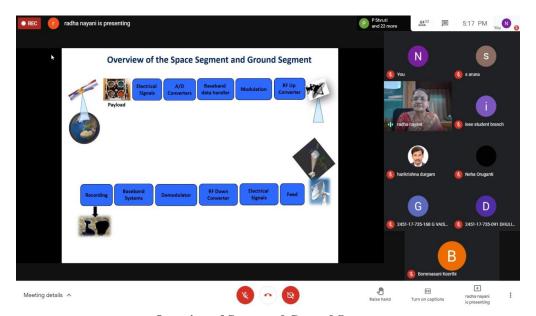




Poster of the Webinar

Mr. N. Bhargava Saketh, Joint Secretary, CASS has introduced the speaker Ms. Radha Nayani to all the attendees. Ms. Radha Nayani has then taken over the session. She spoke about herself and shared about her experience in the field.

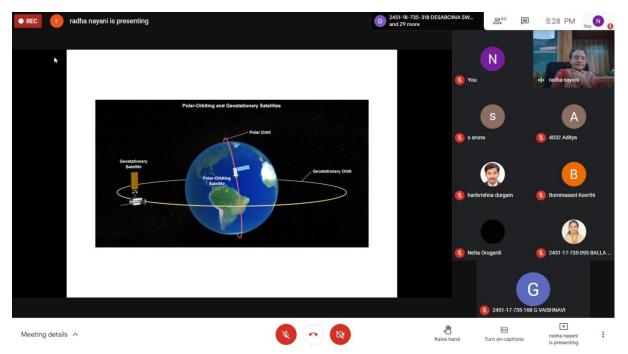
The Speaker has put down the points to be discussed and then explained them one by one. She has started the presentation by briefing the topics like Satellites and their working. She first discussed about the Ground and Space segment. She did this with a help of a well structured flowchart. Later, she went onto giving details about the frequency spectrum of the space and ground segments.



Overview of Space and Ground Segment

Next, she went onto giving a brief description about the Antenna Field elements. She explained how each element is intergrated to the other and the importance of such intergration.

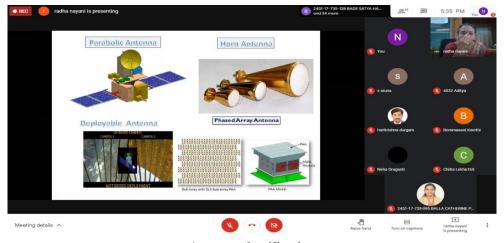
Then, she continued the session by moving onto the topic of Satellite Orbits. She listed out the various orbit shapes available and the reasons behind them. She talked about the different satellite types available based on their working like the Remote Sensing Satellite and Polar Satellite.



A slide about Polar Orbiting and Geostationary Satellites

Later, the speaker has explained about Satellite development flow where she presented a flow diagram and explained the process step by step. It was then continued by talking about different types of satellites available.

She explained about the various satellites and classified them based on their shape. She spoke about the importance of the specific satellite design for its application. She showed the working of each satellite with a help of a video. She has told about the different hierarchical positions available in hardware design and software design by segregating them.



Antenna classification

Next, she spoke about Antennas. She defined them and sopke about their importance. With the help of diagrams and working videos, she presented a summary of all the antennas. She spoke about Parabolic antenna, Horn antenna and the Deployable antenna.

Then the presentation was followed by a Q&A session, she answered all the questions patiently.

Finally, Ms. Shreeya Rishi, Secretary, CASS has delivered the vote of thanks. She has thanked the speaker for her valuable time. She has also thanked the faculty coordinators and attendees for their time and presence.

REPORTED BY-

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