

10.10.2025

# REPORT ON: TECH TALK ON RESEARCH OPPORTUNITIES IN SPACE APPLICATION

DEPARTMENT OF ELECTRONICS  
&  
COMMUNICATION



## INTRODUCTION



The Department of Electronics and Communication Engineering organized an expert talk on Emerging Trends in Space Technology and Remote Sensing on 10th October 2025. The session was led by Dr. J.K.K., an eminent scientist known for his contributions to space research and education. The objective of this lecture was to expose students to the current developments in satellite technology, miniaturized electronics, GIS, and remote sensing systems that form the foundation of modern communication and geospatial studies.

The event provided valuable insights into how advancements in space science and geospatial technologies support national missions like Digital India, Smart Cities, and Agricultural Monitoring Systems.

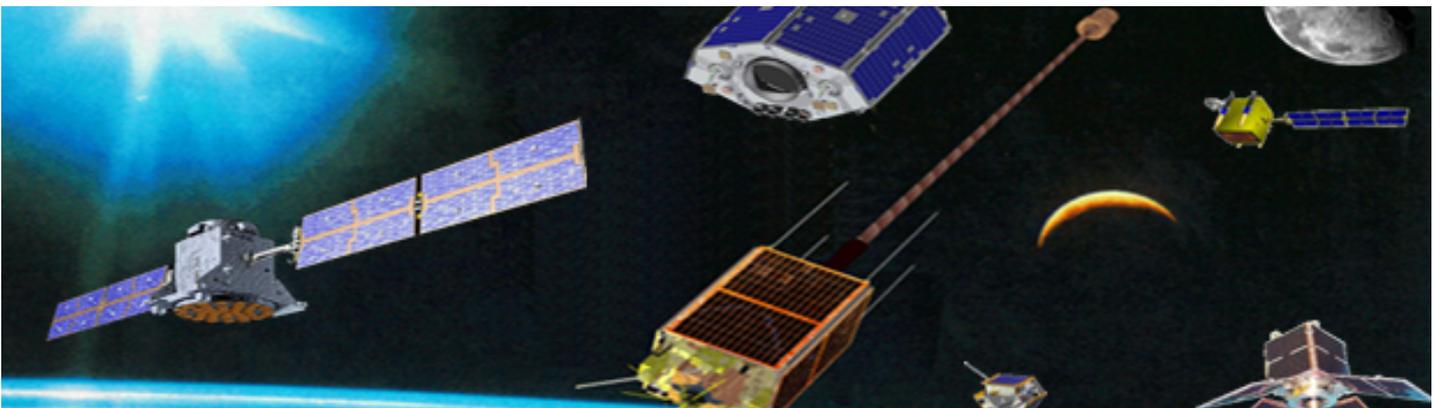
## DR. J KRISHNA KISHORE



**Dr. J. Krishna Kishore**

SCI-G,  
Distinguished Scientist,  
Group Director-ATDG, U.R.Rao Satellite  
Centre(URSC),Bangalore

Dr. J.K.K. is a distinguished professional in the field of Space Science and Remote Sensing with extensive experience in academia and industry collaboration. His work focuses on the integration of satellite technologies, GIS applications, and miniaturized hardware systems for sustainable development. He has delivered numerous lectures across India and abroad, emphasizing the role of students and researchers in building indigenous capabilities in satellite design, VLSI systems, and geospatial data analysis.



His contributions have inspired engineering institutions to set up Centers of Excellence (COEs) for RS-GIS and VLSI research, enabling students to contribute effectively to the growing space technology sector.

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# SESSION OVERVIEW



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The Tech Talk on Research Opportunities in Space Applications conducted by Dr. J.K.K. was an eye-opening and intellectually stimulating session. The speaker shared deep insights into how space technology and remote sensing are evolving with the integration of advanced electronics, satellite communication systems, and geospatial data analytics. Listening to his explanations on small satellites, onboard computing, and the growing role of VLSI and semiconductor research helped us realize the vast scope of innovation available for engineering students today.





The session encouraged us to think beyond classroom concepts and connect theoretical knowledge to real-world applications. It was particularly inspiring to learn how academic institutions like ours can contribute to national missions such as Digital India and Smart Cities through research and technical development. The talk also highlighted the importance of interdisciplinary learning, teamwork, and the use of advanced software tools such as MATLAB, ERDAS, and ENVI for RS-GIS analysis.

Overall, the event was a meaningful learning experience that motivated every participant to explore research-oriented paths, develop innovative ideas, and stay updated with emerging trends in space science and technology. The interaction with the expert, combined with active participation from students and faculty, made the session both informative and memorable.