



EVENT REPORT

IEEE AP-S TC-9 Special Session

"Defense and Next Generation Communication Technology"

Date : 09 June 2025

Time : 02:00 PM – 05:00 PM

Venue : B V Raju Institute of Technology (BVRIT), Narsapur

Organized by : IEEE AP-S Student Branch Chapter, BVRIT in association with IEEE AP-S Technical Committee 9 (Security) and Wireless, Antenna & Microwave Symposium (WAMS) Society.

Session Overview

Following the WAMS 2026 Pre-Conference Workshop, the IEEE AP-S TC-9 Special Session was conducted to provide participants with insights into emerging defense technologies, phased-array antenna systems, radar applications, missile seeker technologies, and next-generation wireless communication systems.

The session brought together experts from defense research organizations, industry, and academia to discuss recent developments and future challenges in security and communication technologies.

The inauguration was graced by internationally renowned IEEE AP-S leaders including:

Prof. Satish Kumar Sharma

Yogesh K. Verma

M. Balachary

Mr. Debaprasad Barad

Dr. Amit Kumar Singh

Dr. Sudhakar Rao

Dr. K Lakshmi Prasad

Dr. Sanjay Dubey

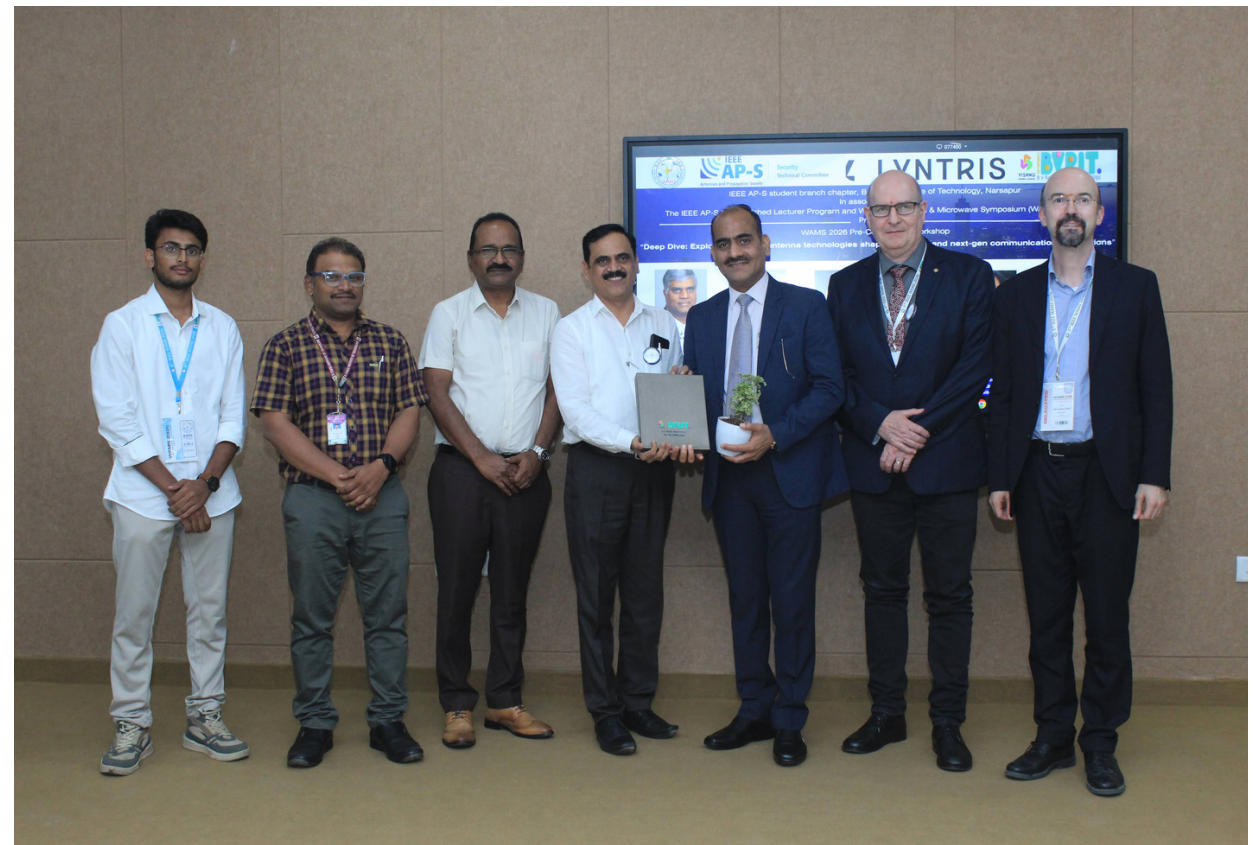
Dr. Sanjeev Reddy B R

Technical Sessions

Prof. Satish Kumar Sharma delivered a lecture on “**Design and Development of Flat Panel Phased Array Antennas for Wireless and Satellite Communications**”, discussing modern phased-array architectures and their applications.



Yogesh K. Verma from DRDO presented “**Next Generation Missile Seekers**”, providing valuable insights into advanced seeker technologies and their role in modern defense systems.



M. Balachary from Astra Microwave Products Limited delivered a talk on “**Phased Array Antenna Systems for Modern RADAR**”, highlighting the latest developments in radar antenna technologies.



Mr. Debaprasad Barad discussed “**Design, RF-Digital Integration and Emerging Trends in Indian Defence R&D**”, emphasizing indigenous technological advancements and defense innovations.



Dr. Amit Kumar Singh concluded the session with a lecture on “**3D Printed Antennas and Reconfigurable Intelligent Surfaces for Adaptive Next-Generation Wireless Networks**”, showcasing future communication technologies and intelligent wireless systems.



Organizing Committee

Faculty Coordinator

Dr. G. Srinivas

Dr. Salauddin

IEEE AP-S Student Volunteer Team

A. Buchaiah
D. Varshitha
Santhosh Reddy
Bharath Simha Reddy
V. S. V. N. Sameer Tanay
Pranay Kumar Chanti

Participant Engagement

Participants actively interacted with the speakers through discussions and question-and-answer sessions. The expert talks provided a comprehensive understanding of defense communication systems, radar technologies, phased arrays, missile seeker systems, and emerging wireless technologies.

Outcomes

The special session enhanced participants' awareness of current research and industrial developments in defense and communication engineering. It also provided valuable exposure to practical applications of antenna systems in security, surveillance, radar, and next-generation communication networks.

Conclusion

The IEEE AP-S TC-9 Special Session was successfully conducted and received an enthusiastic response from participants. The session effectively bridged the gap between academic research and real-world defense applications, inspiring students and researchers to explore emerging opportunities in antenna, radar, and communication technologies.

