



Webinar on

‘Active Antenna Technologies for Mobile communication’

23rd May 2025, Friday (11:00 - 13:00 Hrs)

Webinar Objective

The webinar on “**Active Antenna Technologies for Mobile communication**” aims to explore cutting-edge advancements in phased array antenna technology. In 5G applications, the successful implementation of massive machine type communication (mMTC) and the extreme data throughput specified in the International Mobile Telecommunications-2020 (IMT- 2020 Standard) depend on phased array technology. Similarly, agile scanning phased arrays provide the rapid tracking and continuous connection necessary for increasingly common low Earth orbit (LEO) satellites in the New Space arena and satellite communications. The Sessions will be delivered by the **esteemed speakers** from SAMEER(Society for Applied Microwave Electronics Engineering & Research) IIT Bombay, Savitribai Phule Pune University and IIT Roorkee.

The target audience of the webinar are the officers from DoT LSAs, DoT HQ, Industry forums, Academia and other stakeholders.

Inaugural Session (11:00 - 11:15 Hrs)

11:00 - 11:05 Welcome Address **Sh. Rajesh Gupta**

DDG (WA), NCA-T, Ghaziabad

11:05 - 11:15 Inaugural Address **Sh. Atul Sinha**

DG, NCA-T, Ghaziabad

Technical Sessions (11:15 - 13:00 Hrs)

S. No.	Time (Hrs)	Name of the Topic	Expert Speaker
1.	11:15-11:45	Introduction of phased array Antenna & its application	Dr. Pranoti Bansode-Gaikwad Assistant Professor, Savitribai Phule Pune University
2.	11:45-12:15	Smart Surfaces for Smart Networks: RIS-Enabled Communication Systems	Dr. Ekant Sharma Assistant Professor, IIT Roorkee
3.	12:15-12:45	Pattern Synthesis for Phased Arrays and Their Application in 5G Deployment	Dr. Hanumantha Rao Director General, SAMEER
5.	12:45-12:55	Question & Answer Session	
6.	12:55-13:00	Vote of Thanks	Sh. R P SINGH Director (WA), NCA-T, Ghaziabad

Dignitaries of Inaugural Session



Atul Sinha

DG, NCA-T, Ghaziabad



Rajesh Gupta

DDG (WA), NCA-T, Ghaziabad



R P Singh

Director (WA), NCA-T, Ghaziabad

Online Platform & Registration

Date & Time:

23rd May 2025, Friday (11:00 -13:00 Hrs)

Online Platform:

Microsoft Teams

Link & QR Code to join the Webinar:

<https://tinyurl.com/AAS-Webinar-9th-May>



Expert Speakers

Dr. Pranoti Bansode-Gaikwad, Savitribai Phule Pune University



Dr. Pranoti Bansode-Gaikwad is working as an Assistant Professor in Savitribai Phule Pune University. She has completed her Ph.D from Department of Electronic science, Savitribai Phule Pune university. She has received Young Author recognition award from International Telecom Union-Telecommunication Standardization Sector (ITU-T) in year 2010. She has successfully executed projects sponsored by various Govt. agencies Like ARDE, DRDO. The main focus area of her research is in RF technology, Microwave systems and developing antennas in Radar system and communication systems.

Dr. Ekant Sharma, Assistant Professor, IIT Roorkee



Dr. Ekant Sharma is a faculty member in the Department of Electronics and Communication Engineering at Indian Institute of Technology Roorkee. His research interests include physical layer wireless communication with a focus on 5G and emerging 6G technologies. He has led multiple technology development efforts, including custom-designed Reconfigurable Intelligent Surfaces (RIS) and FPGA-based 5G Distributed Unit accelerator cards. He is also the co-founder of Mantiswave Networks Pvt. Ltd., a deep-tech startup advancing indigenous 5G and 6G solutions through deployments, field trials, and academic collaborations across leading institutions in India.

Dr. Hanumantha Rao , Director General, SAMEER



Dr. Hanumantha Rao (PhD, Queen's University Belfast) is a leading RF/mm-wave scientist with 34+ years at SAMEER, pioneering India's 5G/6G R&D. He developed India's first MIMO/massive MIMO systems and mm-wave phased arrays, collaborating with IITs, IISc, and Georgia Tech. A key figure in 5G standardization, he has 120+ IEEE publications, mentored 11 PhDs, and led strategic projects on metamaterials and RF SoCs. His current work spans intelligent surfaces, UAV detection, and tiled arrays for next-gen networks.

Organizing Team

WA Division, NCA-T, Ghaziabad



Rajesh Gupta
DDG (WA)



R P Singh
Director (WA)



Sandeep Singh
AD (WA)



MPS Tomar
AD (WA)

Contact Details: Shri Sandeep Singh, AD (WA), Tel: 9463502525, e-mail: Sandeep.ntiprit@gov.in