National Communications Academy-T, Ghaziabad
Department of Telecommunications
Ministry of Communications
Government of India

Webinar
on
'Active Antenna Technologies for Mobile communication'

9th 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 e**steemed 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. Deb Kumar Chakrabarti**   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

Deb Kumar Chakrabarti
DG, NCA-T, Ghaziabad

Rajesh Gupta
DDG (WA), NCA-T, Ghaziabad

R P Singh
Director (WA), NCA-T, Ghaziabad

Online Platform & Registration

Date & Time: 9th 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 an Assistant Professor at the Indian Institute of Technology Roorkee, India. The main focus of his research is design of optimization algorithms for beyond 5G /6G wireless communication systems, that can provide multi-gigabit data rates and can improve energy consumption and spectrum utilization by orders of magnitude.

Dr. Hanumantha Rao , Assistant Professor, IIIT Delhi

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

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Rajesh Gupta
DDG (WA)

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Director (WA)

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