

Karyashala (A High-end Workshop: SERB initiative) under the Accelerate Vigyan scheme



on

"Recent Trends and Future Prospects for Beyond 5G in RF, Microwave, and Millimeter Wave Technologies''





Organized by



**Department of Electronics and Communication Engineering** National Institute of Technology Tiruchirappalli

23-29 July, 2023									
<b>Date</b> \Time	Program Schedule								
Date(Time	10:00 AM to 11:15 AM	11:30 AM to 12:45 PM		02:15 PM to 03:30 PM	03:45 PM to 05:00 PM				
23/07/2023 (DAY 1)	Inaugural Talk 1: Sessions 1-2 Topic: Important Concepts of RF, Microwave, and Millimeter Wave Technologies for 5G and beyond Expert: Prof. K P Ray Designation: Director, School of Radar Technology, Head, EE Dept & Chief Public Information Officer (CPIO), DIAT Pune			Inaugural Talk 2: Sessions 3-4 Topic: Recent Advances and Future Challenges of MMW & THz Sensors and Systems for Defence Applications Expert: Dr. Prashant Kumar Mishra Designation: Scientist 'F', Programme AD, RCI, Defence Research and Development Organisation (DRDO), Hyderabad					
24/07/2023 (DAY 2)	Invited Talk 1: Sessions 5-6 Topic: Antennas and Space-Time Metasurfaces for 6G and Beyond Expert: Dr. Debdeep Sarkar Designation: Assistant Professor, Indian Institute of Science, Bangalore			Invited Talk 2: Sessions 7-8 Topic: Critical Perspectives in DRA for 5G applications Expert: Dr. Biswajeet Mukherjee Designation: Assistant Professor, Indian Institute of Information Technology, Design and Manufacturing, Jabalpur					
25/07/2023 (DAY 3)	Invited Talk 3: Sessions 9-10 Topic: Electrically Small Antennas for Wireless Devices Expert: Dr. G Shrikanth Reddy Designation: Assistant Professor, Indian Institute of Technology Mandi		Break)	Sessions 11-12 Topic Hands-on Session on Antenna Design		Tea)			
26/07/2023 (DAY 4)	Technology Expert: Dr. Saptarshi Ghosh	Sessions 13-14 ace and its Applications in Radome or, Indian Institute of Technology	to 02:15 PM (Lunch Break)	Invited Talk 5: Sessions 15 Topic: Reflectarray Design for Electromagnetic Applications Expert: Dr. Ravi Kumar Arya Designation: Distinguished Professor, XSL, ZICUST China	Session 16 Topic Hands-on Session on Microwave Passive Circuits				
27/07/2023 (DAY 5)	Invited Talk 6: Session 17 Topic: Textile Antennas for RFID Applications Expert: Dr. Rajesh Kumar Singh Designation: Assistant Professor, DIAT Pune	<b>Invited Talk 7:</b> Session 18 <b>Topic:</b> Introduction to Machine learning for RF, Microwave and Millimeter Wave Technologies. <b>Expert: Dr. E. S. Gopi</b> <b>Designation:</b> Associate Professor, NIT Trichy	12:45 PM t	Invited Talk 8: Session 19 Topic: Massive MIMO for 5G Applications Expert: Dr. Nagendra Kushwaha Designation: Assistant Professor, IIIT Pune	Session 20 Topic Prototyping and Testing in RF & Microwave	05:00 PM to			
28/07/2023	Invited Talk 9: Topic: Recent trends in the desi Resonator Antennas	Sessions 21-22 gn and development of Dielectric		Invited Talk 10: Sessions 23-24 Topic: Application of Metamaterials/Metasurfaces in Improving the Wireless Systems for Future Wireless Applications					

(DAY 6)	<b>Expert: Dr. Pragati Patel</b> <b>Designation:</b> Assistant Professor, National Institute of Technology, Goa	Expert: I Designati and Techr
29/07/2023 (DAY 7)	Valedictory Talk 1: Sessions 25-26Topic: Radio Frequency Micromachined Devices and Circuits forMicrowave to Sub-millimeter Wave ApplicationsExpert: Dr. Sukomal DeyDesignation: Associate Professor, Indian Institute of TechnologyPalakkad	Topic: Inf Expert: E Designati Tiruchirap

Dr. Basudev Majumder ion: Associate Professor, Indian Institute of Space Science nology, Thiruvananthapuram

## Valedictory Talk 2: Sessions 27-28

novation and Prototyping in RF & Microwave **Dr. Hemant Kumar** ion: Assistant Professor, National Institute of Technology, opalli