

# Shri Vile Parle Kelavani Mandal's DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING

(Autonomous College Permanently Affiliated to the University of Mumbai) NAAC Accredited with "A" Grade (CGPA: 3.18)



# INTERNATIONAL CONFERENCE ON MICROWAVE AND ANTENNA DESIGN

8<sup>th</sup> - 9<sup>th</sup> March, 2024

Organized by

# DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

#### ABOUT ICMAD 2024

In modern day communication, with the increase in spectrum requirements, most of the Wireless Communication Systems are designed in Radio Frequency spectrum & above, i.e., for frequencies above 1 GHz range. Above this frequency range, high frequency design for circuits and antenna has a major role to play which have profound influence on various applications. In view of this and in continuation with the series of conferences organized in the past, this International Conference on Microwave & Antenna Design (ICMAD) 2024 is being organized. ICMAD 2024 will focus on the advances in various aspects of Microwave and Antennas. The conference will help unite Academic Scientists, Engineers and Industry Researchers for exchanging their experiences, sharing research inputs and for discussion of the current practical challenges.

#### IMPORTANT DATES

Paper Submission: 31<sup>st</sup> August, 2023

Notification Acceptance: 15<sup>th</sup> October, 2023

Registration Deadline: 10<sup>th</sup> November, 2023

#### FOR ALL CORRESPONDENCE, CONTACT

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## TOPICS COVERED

## Microwave Theory

- RF and microwave circuit design
- Physical aspects of RF and microwave devices
- Transmission line elements
- Passive circuit elements
- Planar passive filters and multiplexers
- Non-planar passive filters and multiplexers
- Active, tunable and integrated filters
- MEMS components and technologies
- Semiconductor devices and monolithic ICs
- HF, VHF and UHF technologies and applications
- Power amplifier devices and circuits
- Low noise components and receiver
- mm-Wave and THz components and technologies
- Measurement techniques
- Biological effects and medical applications
- Radar and broadband communication systems
- High power microwave industrial applications
- Microwave/RF devices for wireless health care applications
- Multiband, broadband, tunable, and reconfigurable filters
- Resonators, directional couplers and hybrids
- 2D/3D printed RF and microwave components
- Micro-machined transmission lines and waveguides
- Microwave and millimetre wave systems
- Microwave device modelling
- MIMO components
- Novel waveguides and new phenomenon in waveguides
  - Passive components (filters, couplers, transitions, etc)
  - RF MEMs and micro-systems
  - RF Nanotechnology: Carbon, semiconductors and other novel material-based nanotechnology, nanodevices, metamaterials and nanoscale RF components

## Antenna Design

- Antenna theory
- Microstrip antennas
- Wideband/Broadband/Multiband Antennas
- UWB antennas
- Fractal antennas
- Horn antennas & feed components
- Antenna arrays (planar/printed)
- Conformal antennas
- MIMO and smart Antennas
- Small antennas and RF sensors
- Tunable and reconfigurable antennas
- Phased array antennas
- Embedded and wearable antennas
- Dielectric resonator antennas
- 5G antennas
- mm wave, Terahertz and optical antenna
- Reflector and reflect-array antennas
- Metamaterial, meta-surfaces and EBG antennas
- Aircraft antennas
- Radar and remote sensing antennas
- Frequency selective surfaces
- Satellite antennas and payloads
- Antennas for seekers and defence applications
- Antennas for mobile and V2X applications
- Electromagnetic numerical techniques
- Antenna measurements (compact Range, near field, far field, drones etc.)
- Study of scattering characteristics
- Antenna devices and techniques
- Antenna design, modelling, simulation
- Antenna system for mobile communication
- Artificial magnetic conductors

