



On behalf of the **IEEE COMCAS 2023** Steering Committee, it is our pleasure to launch the 9th International IEEE Conference on Microwaves, Communications, Antennas, Biomedical Engineering and Electronic Systems (IEEE COMCAS 2023).

In 2023 the international IEEE COMCAS will continue to evolve and provide an advanced multidisciplinary forum for the exchange of ideas, research results, and industry experience in a range of key areas i.e., microwaves, communications and sensors, antennas, biomedical engineering, RF and microwave devices and circuits, thermal management and electronic packaging, signal processing and imaging, as well as radar, acoustics and microwave system engineering.

In its entirety the event includes a technical program, industry exhibits, and guest presentations from global experts on recent academic and industry advancements.

In launching the 2023 event, we would also like to welcome you to the sunshine of the eastern Mediterranean, in Tel Aviv. As a cosmopolitan city of stunning views and endless innovation Tel Aviv is a center that resonates with an energized atmosphere, streets of storied history, and an internationally recognized nightlife.

Taking place 6-8 November 2023 in Tel Aviv, Israel, at the David Intercontinental Hotel by the Mediterranean Sea; IEEE COMCAS will continue a biennial series tailored to maximize professional networking, support the candid exchange of ideas, and develop a range of enduring opportunities.



### **IMPORTANT DATES**

#### **LIST OF TOPICS**

#### **Communications and Sensors**

Beyond 5G – Systems & Technologies AI, Machine Learning, Deep Learning in Communications and Sensors **Big Data in Communication Networks** MIMO & Space-Time Coding Technologies 5G systems & Millimeter Wave Propagation Cognitive Radio & Spectral Sharing **Communications Security** First Responder/Military Communications **Green Communication** Internet of Things Long Range Low Power Networks Micro/Pico/Femtocell Devices and Systems Modulation & Signal Processing Technologies **On-Body and Short Range Communications** Radio over Fiber & Optical/Wireless Convergence Sensor Networks and Technologies Software-Defined Radio & Multiple Access

#### Antennas, Propagation, and Scattering

Antenna Theory and Design Smart Antennas, Beamforming and MIMO Wave Propagation and Channel Modeling Wave Scattering and RCS NanoEM, Plasmonics, and Applications Metamaterials, FSS and EBG EM Field Theory and Numerical Techniques EM Interference & Compatibility, SI Spectrum Management and Monitoring ELF, RF, µWave, mmW and THz Measurements

#### Electronic Packaging & Thermal Management (P&TM)

Chip, Package and PCB - Design, Advanced Materials and Technologies Chip & Board Level Assembly Advanced Packaging – 2.5D, 3D and Heterogenous Integration 3D Printing & Additive Manufacturing of Electronics **Electro Photonics Packaging** Adhesives, Molding & Encapsulation – Materials & **Technologies** Soldering & Brazing for Electronic Packaging **Bio Medical Packaging** Plating & Coating - Materials & Technologies **Destructive and Non-destructive Testing** Thermal Management in Electronic Systems – Methods, Modeling and Solutions Connectors, Cables & Routing Inspection – Technologies & Methods **Reliability in Electronic Systems** 

#### **Biomedical Engineering**

Big Data in Medicine Artificial Intelligence, Machine Learning, Deep Learning Biomedical Systems and Applications Advances in Medical Imaging Technology Medical RF, MW & MMW Applications and Devices Medical Image Processing Acousto-Optic Technologies Novel Therapeutic Modalities Effects of RF and MW on Biological Tissues

#### RF/MW Devices and Circuits, RFICs

Solid-State Devices, RFICs µWave, mmW and Sub-mmW Circuits/Technologies Nano and THz Devices/Technologies **Microwave Photonics** Passive Components and Circuits Filters and Multiplexers Ferroelectrics, RF MEMS, MOEMS, and NEMS Active Devices and Circuits **RF** Power Amplifiers and Devices Tunable and Reconfigurable Circuits/Systems Analog/Digital/Mixed RF Circuits Circuit Theory, Modeling and Applications Interconnects, Packaging and MCM CAD Techniques for Devices and Circuits **Emerging Technologies** Internet of Things Devices

#### Microwave Systems, Radar, Acoustics

Aeronautical and Space Applications RFID Devices/Systems/Applications Automotive/Transportation Radar & Communications Environmentally Sensitive ("Green") Design UWB and Multispectral Technologies & Systems Emerging System Architectures Modelling Techniques for RF Systems Radar Techniques, Systems and Applications Sonar Systems and Applications Wireless Power Transfer & Energy Harvesting Terahertz Systems Al, Machine Learning, Deep Learning in Microwave, Radar, and Acoustic Systems

#### Signal Processing (SP) and Imaging

Microwave Imaging and Tomography Acoustic/Sonar Imaging and Techniques Radar SP and Imaging, SAR, ATR MIMO SP for Radar Ground and Foliage Penetration Systems Signal Acquisition and Sensor Management DF, Emitter Location, Elint, Array Processing Target Detection, Identification and Tracking Data Fusion Time Domain and UWB SP AI, Machine Learning, Deep Learning in Signal and Image Processing

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> To submit your paper and further information please scan the barcode



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