

Call for Papers

# IEEE COMCAS 2023

6-8 November 2023  
David Intercontinental Hotel  
Tel Aviv, Israel

INTERNATIONAL CONFERENCE ON MICROWAVES, COMMUNICATIONS, ANTENNAS, BIOMEDICAL ENGINEERING & ELECTRONIC SYSTEMS



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

**May 6, 2023**  
**Abstract/Summary  
submission**

**July 14, 2023**  
**Notification  
of acceptance**

**September 4, 2023**  
**Final Manuscript  
submission**

## 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,  $\mu$ Wave, 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  
 $\mu$ Wave, 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  
AI, 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

## Steering Committee

### Conference Chair:

**Shmuel Auster**  
Chair, IEEE Israel Section

### Technical Program

#### Chair and Co-chairs:

**Amir Boag**  
Tel Aviv University, Israel

**Stephen B. Weinstein**  
CTTC, USA

**Caleb Fulton**  
University of Oklahoma, USA

**Reuven Shavit**  
Ben-Gurion University, Israel

**Aleksey Dyskin**  
Inxpect, Israel

**Oren Eliezer**  
Ambiq, Texas, USA

**Amir Landesberg**  
Technion, Israel

**Arie Yeredor**  
Tel Aviv University, Israel

**Vadim Issakov**  
Braunschweig University of Technology,  
Germany

**Gennady Ziskind**  
Ben-Gurion University, Israel

**Timor Melamed**  
Ben-Gurion University, Israel

**Lea Beilkin-Sirota**  
Tel Aviv University, Israel

### Electronic Submissions

#### Chair and Co-chair:

**Benjamin Epstein**  
OpCoast LLC, USA

**Matthias Rudolph**  
BTU Cottbus, Germany

### Exhibition Chair:

**Oren Hagai**  
Interlligent, Israel

### Members at Large:

**Douglas N. Zuckerman**  
IEEE Communications Society, USA

**Eran Greenberg**  
Rafael, Israel

**Aviv Ronen**  
Rafael Ltd., Israel

### Advisor:

**Paz Itzhaki-Weinberger**

### Publications Chair:

**Benjamin Epstein**  
OpCoast LLC, USA

### Young Professionals:

**Aleksey Dyskin**  
Inxpect, Israel

**Erez Zolkov**  
Technion, Israel

### Women in Engineering (WIE):

**Sherry Hess**  
Cadence Design Systems, USA

**Alina Karabchevsky**  
Ben-Gurion University, Israel

### Treasurer:

**Robert C. Shapiro**  
IEEE R5 Past Director  
IEEE COMSOC Past Treasurer

### Local Arrangements Chair:

**Idit Schaffer**  
AEAI, Israel

### Social Functions and Hospitality:

**Meira Auster**  
**Alona Boag**

### Publicity Chair and Co-chairs:

**Pat Hindle**  
Microwave Journal, USA

**Gary Lerude**  
Microwave Journal, USA

**Antti Lautanen**  
Cadence Design Systems, Finland

**Tushar Sharma**  
IEEE MTTs YP, USA

### Honorary Members:

**Benjamin Epstein**  
OpCoast LLC, USA

**The Late Harvey Kaylie**  
Founder and President of Mini  
Circuits

**Stephen B. Weinstein**  
CTTC, USA

## Executive Committee

### Executive Chair:

**Shmuel Auster**  
Chair, IEEE Israel Section

### IEEE Communications Society:

**Douglas N. Zuckerman**  
Past IEEE ComSoc president, USA

**Itai Dabran**  
IEEE ComSoc Chapter Chair, Israel

### Members:

**Amir Boag**  
**Stephen B. Weinstein**

**Benjamin Epstein**

**Robert Shapiro**

**Itzhak Shapir**

**Caleb Fulton**

To submit your paper and  
further information  
please scan the barcode



**COMCAS.ORG**

Conference Secretariat



Ortra Ltd.

Tel: +972-3-6384444

Email: comcas@ortra.com

comcas.org