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# SMACD24

## 2-5 JULY • VOLOS • GREECE

## CALL FOR PAPERS

The **2024** edition of the **International Conference on Synthesis, Modeling, Analysis and Simulation Methods, and Applications to Circuit Design (SMACD)** will be held from **2 to 5 July** in Volos, Greece. SMACD is a forum devoted to modeling, simulation, and synthesis for Analog, Mixed-signal, RF (AMS/RF), and multi-domain (nanoelectronics, biological, MEMS, optoelectronics, etc.) integrated circuits and systems, as well as, emerging technologies and applications. Open-source tools and methods for IC design and experiences with modeling, simulation, and synthesis techniques in diverse application areas are also welcomed. Objective technologies include CMOS, beyond CMOS, and More-than-Moore such as MEMs, power devices, sensors, passives, etc. Accepted papers will be submitted for inclusion into **IEEE Xplore** (subject to meeting IEEE Xplore's scope and quality requirements).

### CAD AND EDA METHODOLOGIES AND TOOLS FOR AMS SYSTEMS (CAD/EDA)

**Synthesis, Sizing & Optimization**
- Multi-level Synthesis Methods
- Physical Synthesis Methods
- High-frequency Circuits & Systems
- Low-Power & Energy-Aware Design
- Parasitic-Aware Design
- Variability-aware & Reliability-Aware
- Sizing & Optimization Methods
- Procedural Design Methods

**Modeling**
- Performance/Behavioral
- Power and Electro-thermal
- Reliability and Variability
- RF/microwave/mm-wave
- Signal/Power Integrity
- Electromagnetic Theory
- Transmission Line Theory
- Automated Model Gen.

**Simulation, Verification & Test**
- Behavioral Simulation
- Numerical & Symbolic
- RF Circuit Simulation
- Electromagnetic Simulation
- Multilevel Simulation
- Analysis of Variability Effects
- Formal/Functional Verification
- Test & Design-for-Test

### EMERGING TECHNOLOGIES AND APPLICATIONS (ETA)

**CAD for/using Emerging Technologies**
- CAD for Bio-Electronic Devices, Bio-Sensors
- CAD for Multi-Domain Devices and Circuits
- CAD for Nanophotonics and Optical Devices/Interc.
- CAD using AI and ML Algorithms
- CAD using Cloud Computing
- AMS CAS Soft and Hard IP Blocks Generating Meth.

**Hardware Security**
- Hardware Security primitives (PUFs, etc.)
- Attacks and Countermeasures
- Anticounterfeiting
- Methods, Architectures and Tools for Secure Design

**Emerging Devices and Paradigms**
- Emerging Device Modeling (Steep-Slope, TFET, NCFET, PTM, Memristor, etc.)
- Design Strategies using Emerging Devices
- Emerging Devices in Security
- Devices, Hardware and Methods for Bio-Inspired and Neuromorphic Computing

### AMS ICS AND MULTI-DOMAIN DESIGN APPLICATIONS (DES)

**Design Applications**
- Internet of Everything
- Automotive Systems
- Biomedical and Bio-inspired CAS
- Low-Power Low Voltage CAS
- Sensors and Sensing Systems
- Security Systems
- Aerospace Systems
- Renewable Energy Systems

## IMPORTANT DATES

Paper Submission Deadline ..... February 4th, 2024
Author Notification ..... March 19th, 2024
Camera Ready Paper Submission ..... April 8th, 2024
Early Registration Deadline ..... April 8th, 2024

## TECHNICAL CO-SPONSORSHIP BY

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CAS IEEE CIRCUITS AND SYSTEMS SOCIETY

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