



SMACD 2025

where circuits come alive

7-10 July • Istanbul • TURKIYE

info@smacd-conference.org
www.smacd-conference.org

Preliminary Call for PAPERS

The 2025 edition of the International Conference on Synthesis, Modeling, Analysis and Simulation Methods, and Applications to Circuit Design (SMACD) will be held from 7 to 10 July in Istanbul, TURKIYE. 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 METHODS AND TOOLS FOR AMS SYSTEMS

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 Design
- 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 System
- 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 Emerging Technologies

- CAD for Bio-Electronic Devices, Bio-Sensors
- CAD for Multi-Domain Devices and Circuits
- CAD using Cloud Computing
- AMS Soft and Hard IP Blocks Generating Meth.

ML for CAD/EDA

- ML for device/circuit modelling
- ML for circuit/system simulation
- ML for automatic sizing and layout

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
- 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

- Internet of Everything
- Automotive Systems
- Biomedical and Bio-inspired CAS

- Low-Power Low Voltage CAS
- Sensors and Sensing Systems
- Security Systems

IMPORTANT DATES

Paper Submission Deadline.....February 14, 2025

Author Notification.....April 8, 2025

Camera Ready Paper Submission.....April 30, 2025

Early Registration Deadline.....April 30, 2025

ORGANIZED BY



**İstanbul
Bilgi University**

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