SMACD 2025
where circuits come alive

7-10 July • Istanbul • TURKIYE

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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. The Conference Proceedings will be published at the **IEEE** *Xplore®* **Digital Library**.

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
◦ Sizing & Optimization Methods
◦ Procedural Design Methods

Modeling
◦ Performance/Behavioral
◦ Power and Electro-therma
◦ 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 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
◦ Aerospace Systems
◦ Renewable Energy 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

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CONTACT INFO

info@smacd-conference.org
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