37th International Conference on Microelectronic Test Structures
March 24 - 27, 2025, The Historic Menger Hotel in San Antonio, TX, USA

Looking for the best opportunity to present and discuss your ideas and results about test structures, measurements, and characterization? This is your chance! Join the 37th ICMTS conference.

The Historic Menger Hotel invites you to stay. The reservation portal is now open. Don't wait, see you there.

This conference is co-sponsored by the IEEE Electron Devices Society. All presented papers will be submitted for possible inclusion on **IEEE *Xplore*®**. Original papers are solicited presenting new developments in *topics relevant to ICMTS*, including but not limited to, *test structures, measurements, and results*, as outlined below. This **one-track technical program** will award a **Best Paper** that will be voted on by the Technical Program Committee. In addition, **Tutorial Short Course** will precede the main conference while several of the best measurement, equipment design, and manufacturing experts, will participate in the **equipment exhibition** and presentations.

- Design
  - Methodologies, verification
  - Within-die circuits for process characterization/monitoring
  - Design enablement – Characterization and validation of digital and analog libraries
- Measurement techniques
  - DC, AC and RF measurements: setup, test and analysis
  - Reliability test - including thermal stability, failure analysis, ESD/LUP, EM. Wafer Level (WLR), *etc*.
  - Statistical analysis, variability, throughput increase, smart test strategies, compact modeling
  - Use of machine learning and AI in analysis of data sets - parameter extraction *etc*.
  - Wafer probing, within-die measurements, in-line metrology
  - Throughput, testing strategies, yield enhancement and process control tests, TCAD
- Applications
  - Emerging memory technologies (single cell, arrays, and application in neural networks)
  - Emerging transistor technologies for digital/analog/power applications
  - Photonic devices - silicon integration, new displays (OLED, μ-displays)
  - Flexible electronics and sensors (organic and inorganic materials)
  - M(N)EMS, actuators, sensors, PV cells and other emerging devices

The author's abstract submission (template) consists of up to four pages in PDF format (font-embedded). The first page should include a **title**, a **50-word summary**, author name(s), full address, contact number, and e-mail of the lead author, and any preference for oral or poster session presentation. The body of the abstract should consist of one page of text (800 to 1000 words) and up to **two pages of major figures and tables**.

The selection process will be based on the technical merit and will be highly weighted in favor of abstracts with *high test structure content (including illustration) along with measurements and data analysis*.

The abstract submission deadline has been extended to November 29th, 2024, please allocated appropriately for 21- day company external publication review periods.

Abstracts can be submitted via the ICMTS website http://www.icmts.net using the "Submit Abstract" link on the front page.

Notice of paper acceptance will be sent to the selected authors the week of January 13th, with instructions for the expanded manuscript preparation for the conference proceedings. The deadline for **submission of the final paper** will be **March 6th, 2025**.

Please join the ICMTS group at www.linkedin.com/groups/3804498, if you have in interest all things test structure related.

For further technical information, please contact the technical program chair:
Dennis Pretti, Micron Technology, Inc. djpretti@micron.com

General Chair:
Chadwin Young
University of Texas, Dallas
chadwin.young@utdallas.edu

Technical Program Chair:
Dennis Pretti
Micron Technology, Inc
djpretti@micron.com

Tutorial Chair:
Kejun Xia
TSMC
Kejun.Xia@gmail.com

Equipment Exhibition Chair:
Ben Morris
Advantest Corporation
ben.morris@advantest.com

Local Arrangements:
Chadwin Young
University of Texas, Dallas
chadwin.young@utdallas.edu

ICMTS Steering Committee:

Asian Representative:
Yoshio Mita
The University of Tokyo
mita@ee.t.u-tokyo.ac.jp

European Representative:
Carlo Cagli
STMicroelectronics
carlo.cagli@st.com

USA Representative:
Larg Weiland
PDF Solutions, Inc
larg.weiland@pdf.com