

ADMETA 2025

34th Advanced Metallization Conference

October 8(Wed) – 10(Fri), 2025 / Onsite-Online Hybrid Conference

Takeda Hall, The University of Tokyo, Japan

Sponsored by the Japan Society of Applied Physics

Paper Submission Deadline: June 30, 2025

Details of the submission guidelines and format samples: https://www.admeta.org/cpt_admeta/call-2025-en

ADMETA is approaching its 34th annual meeting and has a long history of important contributions to state-of-the-art interconnect progress for advanced logic and memory devices. This year, the name ADMETA was shortened by removing "plus" and "Asian session," which redefined it as a unique international conference that focuses on interconnect formation processes.

ADMETA covers interconnect technology, including materials, processes, equipment, devices, circuit design, integration, characterization, assembly, and packaging. We will comprehensively discuss topics ranging from fundamentals to applications, together with researchers and engineers from industry, government, and academia. Advanced semiconductor devices continue to attract growing global attention, and a similar level of excitement has been growing in Japan over the past two or three years. We look forward to novel developments in the field of interconnect technology. In particular, we hope that the latest interconnect technology from Japan will continue advancing and contributing to the global semiconductor industry's growth.

The theme for ADMETA 2025 is "Cutting-edge device technology through the fusion of interconnect technology and new concepts." Based on this theme, we plan to offer an appealing program, including a tutorial session (conducted in Japanese only), plenary talks, invited talks, and a poster session.

We look forward to seeing you in Tokyo and hope you enjoy ADMETA 2025.

ADMETA 2025 General Chair: Takeyasu Saito (Osaka Metropolitan University)

Topics of interest

- **Integration:** Interconnect Structure and Performance, Parasitic Capacitance, Reliability Technology, Testing and Analysis
- **Reliability:** Science and Failure Analysis, EM, SIV, TDDDB, Defect Detection and Analysis, Failure Mechanism and Modeling
- **Metallization:** PVD, CVD, ALD, Plating, Barrier Metal, New Material, Alloy, Supercritical Fluid, Reflow
- **Interconnects patterning:** Etching, Lithography, Advanced Patterning, Hard Mask, Pattern Transfer, SAMs,
- **Low-k Dielectric:** CVD, ALD, SOD, Film Properties, New Materials, Dielectric Structures (Air Gap), Metrology
- **CMP:** Planarization Technology, Slurry, Pad, Dress, End Point Detection, Cleaning, Anti-corrosive Technology
- **Contact:** Silicide, Interface, Solid Phase Reaction, Shallow Junction, Crystal Properties, Electron Properties, Carrier Transport
- **MEMS/RF:** Interconnection Structure and Materials, Packaging, Fabrication Process Technology, Device Design
- **Emerging Technology:** Active Wiring, Power Electronics, Silicon Photonics, Flexible Electronics, Energy Harvesting
- **Backend Device Technology:** Tech. for Embedding Devices (MRAM, PCRAM, ReRAM, DRAM etc.), Materials and Processing of Magnetics, Phase-Change and Resistive-Change Devices, Electrode, Metallization
- **Nano Carbon and 2D materials:** Graphene, CNT, Transition-metal Dichalcogenide, Deposition, Integration, Electrical Characteristics, Reliability, Evaluation, Analysis
- **3D and Packaging:** TSV, TMV, Stacking Method (CoW, WoW), Heterogeneous Integration, Thinning, Planarization, Mold Compound, Bonding, Bump, Stress and Thermal Analysis, Sealing, Cooling, Reliability



Paper submission

Prepare an abstract according to the directions below and submit it to the ADMETA 2025 Secretariat. **The abstract should be in A4 format, up to 2 pages. Figures and tables are recommended but not required. Presentation options: Oral (15 min talk + 5 min Q&A) or Poster. Abstracts are due by **June 30, 2025.****

Prospective authors must submit a PDF file of up to 2 pages, including necessary figures and tables. Please send the PDF file of the manuscript, the subject of your paper (selected from the Topics of Interest), and your preferred presentation style (Oral or Poster) to the secretariat office via e-mail. In the abstract, please indicate the corresponding author and include their mailing and e-mail addresses. A template for the abstract can be downloaded from the ADMETA 2025 website. Notification of acceptance will be sent to authors by August 31, 2025. Upon notification, authors will be required to confirm their participation in the conference.

Accepted abstracts will be included in the online conference proceedings, which participants will receive on-site at the ADMETA 2025 registration desk. For details on submission guidelines and format samples, please visit: https://www.admeta.org/cpt_admeta/call-2025-en

Special Issue of JJAP

Authors who presented papers at ADMETA 2025 are encouraged to submit their original manuscripts to a Special Issue of the Japanese Journal of Applied Physics (JJAP) dedicated to ADMETA 2025. The deadline for manuscript submission to the Special Issue is scheduled for around **November 2025**. Manuscripts will be reviewed based on the JJAP standards for original papers. The JJAP Special Issue accepts regular papers (RP), brief notes (BN), and reviews (RV) and is scheduled for publication in 2026.

Reminder: Since papers in the Special Issue must be original, please ensure that the same content is not submitted to any other journal.

Conference Topics: October 9-10, 2025 (in English)

- Advanced Integration and Process
- Advanced Metallization
- CMP and Cleaning
- Emerging Technologies
- Next Generation Interconnect (Carbon, Optical Interconnect etc.)
- Thin films and Dielectrics
- 3D Device, TSV and Packaging

Tutorial Topics: October 8, 2025 (in Japanese)

- Semiconductor Market Trend
- Logic Integration (FEOL)
- BEOL Integration and reliability
- Memory (DRAM or/and NAND)
- 3D Packages
- CVD/ALD
- Etching
- Metal
- CMP

* The full list of invited speakers and tutorial lecturers will be announced later.

** The official language of the tutorial lecturers is Japanese.

Contacts: ADMETA 2025 Secretariat

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