ICEP-IAAC2025 Conference Report

2025.7.24

ICEP-IAAC2025 Organizing Committee

Conference Details

Title: 2025 International Conference on Electronics Packaging
joined with iMAPS All Asia Conference

Date: April 15–18th, 2025

Venue: Wakasato Municipal Cultural Hall, Nagano City, Nagano Prefecture, Japan

Number of Registrants: 964 (730 from Japan, 234 from 17 other countries and regions)

Number of Presentations: 237 (IAAC: 7, Keynotes: 5, Oral: 181, Poster: 44)

Financial Sponsors: 38 companies

Sponsor: Japan Institute of Electronics Packaging (JIEP)

Technical Co-Sponsors: IEEE EPS, IEEE EPS Japan Chapter, iMAPS, SMTA

Joint Conference: iMAPS All Asia Conference (IAAC)

Welcome Reception Venue: Hotel Metropolitan Nagano

Organizing Committee

General Chair: Taiji Sakai, TSMC Japan 3DIC R&D Center

General Vice Chair: Takaaki Ishigure, Keio University
Yasuhiro Morikawa, ULVAC
Ryo Endo, Rapidus

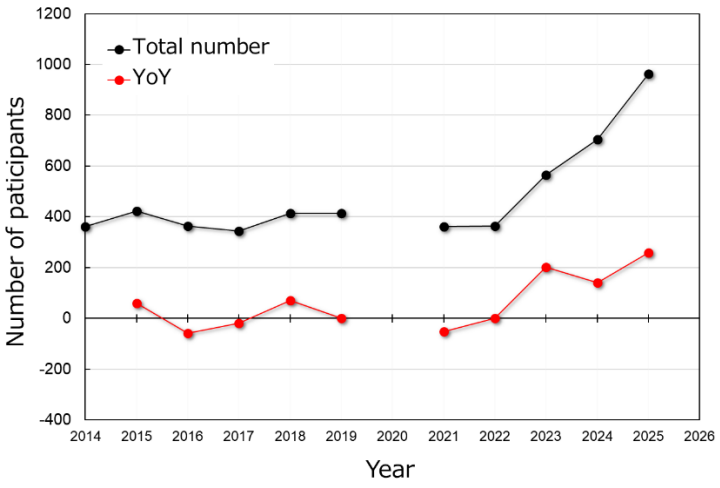
Technical Program Committee: 47 members

Operation Committee: 31 members

International Technical Committee: 6 members

Advisory: 10 members

Participant Trends



Conference Summary

The International Conference on Electronics Packaging (ICEP), which originated in 1980 from the former IMC, celebrated its 46th year in 2025. Held from April 15th to 18th in Nagano City, Japan, ICEP was once again co-hosted with the iMAPS All Asia Conference (IAAC) for the first time since 2018. The event closed with great success, welcoming a record number of 964 registrations - 730 from Japan and 234 from 17 countries and regions, marking a substantial increase of 259 attendees from the previous year.

Venue (Wakasato Municipal Cultural Hall)

IAAC Special Session

As this year marked a joint event with the iMAPS All Asia Conference, a special session titled “3D Chiplet Technologies for Automotive / AI Applications” was held on the afternoon of April 15th. With coordination from Beth Keser (Zero ASIC, former IMAPS President) and members of the IMAPS Global Collaboration Meeting, the session opened with a keynote by Mr. Kanazashi from Japan’s Ministry of Economy, Trade and Industry, who presented the latest updates on semiconductor investments in Japan. This was followed by seven distinguished speakers from various countries delivering insightful lectures.

Presentation Scene from the IAAC Special Session

ICEP Presentation Summary

The conference covered the latest advancements in electronics packaging, focusing on a wide range of topics including AI applications in manufacturing, low-temperature soldering, Cu-Cu bonding, glass substrates, advanced packaging, and thermal management.

• In AI applications, the use of AOI (Automated Optical Inspection) for printed circuit boards was presented, highlighting improvements in manufacturing efficiency.

• Research on low-temperature soldering introduced evaluations of Sn-Bi and Sn-In alloys in terms of thermomechanical properties, wettability, and reliability, indicating ongoing progress toward finer pitch and lower temperature processes.

• Cu-Cu bonding topics featured innovations such as low-temperature bonding using nanotwinned or nanocrystalline Cu, and enhanced bond strength through surface treatments and photo-activation.

• For glass substrate technologies, process advancements like TGV formation, Cu plating, sputtering, and adhesion improvement were shared, along with current challenges and future prospects.

• In advanced packaging, themes included 3D integration, heterogeneous integration, hybrid bonding, and Fan-Out structures, with presentations on reliability evaluations and warpage control techniques.

• Thermal management topics included high thermal conductivity materials (e.g., Cu nanoparticles, diamond composites) and cooling technologies (two-phase cooling, air cooling, TIM interface resistance evaluation), all aiming to support thermal control in high-performance devices.

• In photonic-electronic convergence, the session featured research on silicon photonics and polymer waveguide interfaces, CPO-compatible connector designs, and optical mode evaluation techniques, anticipating applications in next-gen communications.

Active participation from academia, industry, and government was notable, and Q&A sessions were highly engaging. Presentations on glass substrates, hybrid bonding, and automation attracted significant interest, reaffirming ICEP's vital role as an international forum for technology exchange.

Presentation Scenes

Welcome reception

The Welcome Reception was held on April 16th at Hotel Metropolitan Nagano. Mayor Kenji Ogiwara of Nagano City delivered a warm welcome speech, followed by a traditional Kagami-wari sake barrel opening ceremony on stage. The evening also featured a vibrant performance of the Shishimai (lion dance) by the Kazama Shrine Daidaikagura Preservation Society. Local specialties, especially a variety of Nagano sake, were served, and over 700 attendees enjoyed this valuable networking opportunity.

Greetings from Mr. Kenji Ogiwara, Mayor of Nagano City

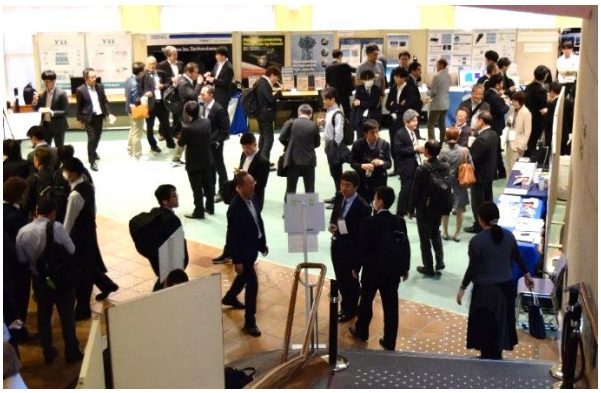
Kagami-wari (Sake Barrel Opening) Ceremony

Toast Ceremony

Shishimai Lion Dance Performance

Sponsor’s Exhibition

During the event, 32 companies and organizations showcased their semiconductor-related businesses at exhibition booths. On the evening of April 17, a standing buffet party was held in the exhibit area, where participants engaged in friendly discussions with exhibitors and enjoyed a lively bingo game.

Scenes of Exhibition Hall

Award ceremony

An award ceremony was held for 4 Outstanding Technical Paper Awards and 2 Poster Awards from ICEP2024, as well as 5 IEEE EPS Japan Chapter Young Awards.

Commemorative Photo after the Award Ceremony

Next Event Announcement

The next ICEP will be held from April 14th to 17th, 2026, in Hiroshima City, Hiroshima Prefecture, Japan. It will be co-hosted with the IEEE EPS Hybrid Bonding Symposium. The hosting team is already working diligently to make the upcoming event even more successful than this year.

We look forward to welcoming many participants once again.

For more information, please visit the ICEP website.

Link: https://www.jiep.or.jp/icep/