



2024 IEEE International Reliability Physics Symposium (IRPS)

The IEEE International Reliability Physics Symposium (IRPS) is the world's premier forum for leading-edge research addressing developments in the Reliability Physics of devices, materials, circuits, and products used in the electronics industry. IRPS is the conference where emerging reliability physics challenges and practical solutions to achieve realistic end-of-life projections and mitigation are first discussed.

In 2024, the IRPS will be held on 14-18 April at the Hilton DFW Lake, Dallas, Texas. Over the course of the conference, IRPS will offer a blended mix of keynote talks, tutorials, year-in-reviews, workshops, vendor exhibits, and technical presentations. Abstracts are due by 22 October 2023. Late breaking news submissions are welcome by 8 January 2024.

For over 60 years, IRPS has been the premier reliability conference, drawing presentations and attendees from industry, academia, and governmental agencies worldwide. No other meeting presents as much leading work in so many different areas of reliability as IRPS. These areas comprise electronic devices, including silicon and non-silicon devices, process technology, nanotechnology, optoelectronics, photovoltaics, MEMS technology, circuits, and systems reliability, including packaging. IRPS 2024 is now soliciting increased participation in the following areas: GAA, nanosheets, ribbonFETs, Forksheets, SiGe channels, 3D packaging, heterogeneous integration, and reliability-aware EDA.

IRPS 2024 will be kicked off by keynote presentations from reliability experts covering the latest reliability trends, and mitigation approaches from various industry perspectives.



Prof. Shinichi Takagi,
The University of Tokyo



Dr. Rajeev Malik
IBM Quantum



Dr. Yu Gyun Shin
Samsung Electronics

Further opportunities at the Symposium include:

- **Tutorial Program.** The IRPS tutorial program is a comprehensive event designed to help new engineers and experienced researchers. The program contains both beginner and expert tracks and is broken down into topic areas that allow the attendees to participate in tutorials relevant to their work with minimal conflicts between subject areas.
- **Year-in-Review Session.** These seminars provide a summary of the most significant developments in the reliability community over the past year. This serves as a convenient, single source of information for attendees to stay up to date with the recent reliability literature. Industry and academic experts serve as the “tour guides” and save your time by collecting and summarizing this information as efficiently as possible.
- **Poster Reception.** The poster session provides an additional opportunity for authors to present their original research. The setting is informal and allows for easy discussion between authors and other attendees.
- **Workshops.** The workshops enhance the Symposium by providing the attendees an opportunity to meet in informal groups to discuss key reliability physics topics with the guidance of experienced moderators. Some of the workshop topics are directly coupled with the technical program to provide a venue for more discussion on the topic.
- **Vendor Exhibits.** Held in parallel with the technical sessions, the equipment demonstrations provide a forum for manufacturers of state-of-the-art laboratory equipment to present their products. Attendees are encouraged to visit the manufacturers’ booths for information and demonstrations.
- **IRPS Paper Awards.** IRPS awards: Best Paper, Best Student Paper, Best Posters, and People’s Choice.
- **IEW Co-Location.** In 2024, the IRPS will be co-located with the International ESD Workshop (IEW). Now in its 17th year, the IEW provides a relaxed, invigorating atmosphere to present new work and engage in discussions about the latest issues confronting the Electrostatic discharge (ESD) and electrostatic over-stress (EOS) communities.

For the call for papers and other information, visit the IRPS webpage (www.irps.org) or join the IRPS LinkedIn group (<https://www.linkedin.com/company/89865382/admin/feed/posts/>)

The IRPS committee members look forward to seeing you in Dallas, Texas!

Koji Eriguchi 2024 IRPS General Chair, Kyoto University
Taiki Uemura 2024 IRPS Publicity Chair, Samsung Electronics