







CALL FOR PAPERS

IMPORTANT DATES

Friday, April 12, 2024
Abstract Submission Deadline

Monday, June 10, 2024

Author Notification

Sunday, September 22
Short Courses

Monday, September 23 -Thursday, September 26

Technical Program

ORGANIZING COMMITTEE

General Co-Chairs

Pai-Chi Li National Taiwan University Wan-Thai Hsu Soundskrit

Technical Program Chair

Susan Trolier-McKinstry
Pennsylvania State University

Technical Program Co-Chair (Ultrasonics)

Marvin Doyley University of Rochester

Technical Program Co-Chair (Ferroelectrics)

Uwe Schroeder NaMLab gGmbH

Technical Program Co-Chair (Frequency Control)

Laura Sinclair NIST

Technical Program Co-Chair (PFM)

Andrei Kholkin University of Aveiro The 2024 IEEE Ultrasonics, Ferroelectrics, and Frequency Control Joint Symposium will take place September 22 – 26, 2024 at the Taipei Nangang Exhibition Center in Taipei, Taiwan. This joint conference celebrates the 70th anniversary of the IEEE UFFC Society.

The following conferences will be involved:

- » International Ultrasonics Symposium (IUS)
- » International Symposium on Applications of Ferroelectrics (ISAF)
- » International Frequency Control Symposium (IFCS)
- » Piezoresponse Force Microscopy Workshop (PFM)

Video Submission

All authors will be required to submit a pre-recorded video of their presentation by September 12, 2024. The content in your video may be modified for your live presentation. There's no need to include any details that are confidential or that you prefer not to disclose.

Topics

IUS

Group 1: Medical Ultrasonics

Group 2: Sensors, NDE & Industrial Applications

Group 3: Physical Acoustics

Group 4: Microacoustics – SAW, FBAR & MEMS

Group 5: Transducers & Transducer Materials

ISAF

Group 1: Fundamentals and Theory of Ferroelectrics and Related Materials

Group 2: Processing of Ferroelectrics Crystals, Ceramics, Thick & Thin Films

Group 3: Characterization & Properties of Ferroelectrics

Group 4: Applications of Ferroelectrics, Piezoelectrics and Related Materials

IFCS

Group 1: Materials, Resonators and Resonator Circuits

Group 2: Oscillators, Synthesizers, Noise and Circuit Techniques

Group 3: Microwave Frequency Standards and Applications

Group 4: Sensors and Transducers

Group 5: Timekeeping, Time and Frequency Transfer, GNSS Applications

Group 6: Optical Frequency Standards and Applications

Joint Sessions

- » Al,ScN for PiezoMEMS, Resonators and Ferroelectrics
- » Materials Development for Ultrasound Transducers
- » Domain Studies in Ferroelectrics
- >> Piezoelectric Micromachined Ultrasonic Transducers (PMUT)
- » Machine Learning for Ultrasonics, Ferroelectrics and Frequency Control
- » Wearable Devices

PFM

- » Instrumental Aspects of PFM, ESM, SS-PFM and Related Techniques
- » Nanoelectromechanics of Materials and PFM/ESM Theory
- » Ferroelectric Tunnelling and Memristor Effects Characterized by PFM/ESM
- » Multiferroic Phenomena on the Nanoscale
- » Disordered Ferroelectrics and Mesoscopic Effects by PFM
- » Ferroelectric Data Storage and Polarization Lithography
- » Ionic Conductors, Battery Materials and Fuel Cells on the Nanoscale
- » Ferroelectric Photovoltaics and Tip-Enhanced Phenomena
- » Ferroelectric Semiconductors and Surface Phenomena
- » Interface Engineering via PFM
- » Biocompatible & Organic Polar Materials on the Nanoscale
- » 1D and 2D Nanostructured Materials via PFM

Student Paper Competition and Travel Support

Students submitting abstracts are invited to participate in a student paper competition. To participate, the student must be the lead author and present their paper. Limited funds are available to support travel for IEEE UFFC student member attendees at the 2024 symposium. Awards will be given on a competitive basis.

Committee

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Andrei Kholkin University of Aveiro

WIE Chair

Azadeh Ansari

Georgia Institute of Technology

Tutorial Chairs

Ultrasonics:

Wei-Ning Lee University of Hong Kong

Ferroelectrics:

Neus Domingo ORNL

Frequency Control:

Archita Hati

NIST

Exhibition Chairs

Overall:

Ken-ya Hashimoto University of Electronic Science and Technology of China

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Yiliu Wang Skyworks

Ferroelectrics:

Andrew Bell University of Leeds

Frequency Control:

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ΤI

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