### Okinawa Convention Center, Okinawa, Japan April 21-24, 2025



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MSJ President, Yokohama National University

#### Conference Chair Hideto Yanagihara

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### Conference Secretariat Yasuyoshi MIYAMOTO

NHK (Japan Broadcasting Corp.)

#### Yota TAKAMURA

Tokyo Institute of Technology

### https://www.magnetics.jp/icaums2025/



### **Call for Papers**

Dear Colleagues and Friends,

I welcome all of you to the 7th International Conference of the Asian Union of Magnetics Societies (IcAUMS 2025) in Okinawa, Japan, from April 21-24, 2025.

Since its inception in 2010, IcAUMS has been a cornerstone event for the magnetics community, fostering the exchange of cutting-edge research and collaboration across the Asia-Pacific region. This year, we are honored to continue this proud tradition in Okinawa's beautiful and culturally rich settina.

I want to extend special recognition to all Organizing Committee members, especially Prof. Yasushi Takemura,



Young Keun Kim Honorary Chair, IcAUMS 2025

the General Chair, and Prof. Hideto Yanagihara, the Conference Chair, for their outstanding dedication and tireless efforts in organizing this event. Their leadership has been instrumental in shaping what promises to be an exceptional conference. Our comprehensive program offers stimulating plenary talks and engaging oral and poster presentations, covering the latest advancements in magnetism and magnetic materials. Your active participation and valuable contributions are crucial to this conference's success and our field's advancement.

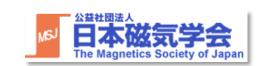
Beyond the scientific program, Okinawa provides a stunning networking and cultural exploration backdrop. We encourage you to take advantage of this unique opportunity to forge new connections and experience the rich heritage of this remarkable island.

Warm regards,

#### Young Keun Kim

Honorary Chair, IcAUMS 2025 **President, The Asian Union of Magnetics Societies** Professor, Materials Science and Engineering, Korea University





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### **Conference Topics**

#### A. Spintronics

- 1. Spin-Orbit Torque
- 2. Spin-Transfer Torque
- 3. Magnetoresistance
- 4. Terahertz spintronics
- 5. Spin Current
- 6. Spin Caloritronics
- 7. MRAM
- 8. Skyrmions

#### **B. Nanostructured Magnetic Materials**

- 1. Interface Effects
- 2. Magnetic Domains
- 3. Thin Films
- 4. Superlattices
- 5. Nanowires
- 6. Exchange Bias
- 7. 2D Materials

#### C. Magnetic Recording and Information Technology

- 1. Computing Devices
- 2. Patterned Media
- 3. Read/Write Heads

#### D. Magnetization Dynamics

- 1. Spin Waves
- 2. Micromagnetics
- 3. Ultrafast Switching

#### E. Fundamental Properties of Materials

- 1. Electronic Structures
- 2. Magnetic Anisotropies

#### F. Novel Magnetic Phenomena

- 1. Spin Glasses
- 2. Superconductivity
- 3. Magnetoelasticity
- 4. Multiferroics
- 5. Oxide Magnets
- 6. Voltage Controlled Magnetism

#### G. Soft/Hard Magnetic Materials and Their Applications

- 1. Soft/Hard Magnetic Materials
- 2. Permanent Magnets
- 3. Amorphous Alloys
- 4. Ferrites

#### H. Energy Applications of Magnetic Materials

- 1. Motors
- 2. Transformers
- 3. Power Electronics
- 4. Energy Conversion

#### I. Bio-magnetism and Biomedical Applications

- 1. Nanoparticles
- 2. Chemical Magnetism
- 3. Biomedical Sensors and Devices
- 4. Magnetofluidics
- 5. Molecular Magnets

#### J. Functional Magnetic Devices

- 1. High Frequency
- 2. Sensors
- 3. Actuators
- 4. Magneto-Optics
- 5. Magnetic Shielding and Absorption
- 6. Wireless Power Transfer

#### K. Magnetic Characterizations

- 1. Microscopy
- 2. Soft/Hard X-rays
- 3. Magnetic Measurement Techniques

#### L. Leading-edge technology in Magnetism

- 1. Material Informatics
- 2. Artificial Intelligence
- 3. Neuromorphic Spintronics
- 4. Quantum Computer

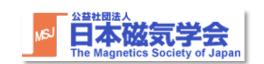
#### **Conference Secretariat**

The Magnetics Society of Japan Rm 207, Tokyo YWCA Bldg.

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#### 1. Invited Presentations and Symposia

We are planning symposia for the Conference. The purpose of the symposia is to broaden the knowledge of members and to promote further research and development activities in magnetism and magnetic engineering. All symposium sessions will consist of invited talks. Invited speakers and special symposia will be selected from the nominations received and will be contacted by Program Co-Chairs. Invited talks will be 25 minutes long, followed by a 4-minute discussion period.

#### 2. Abstract Submission

The deadline for digest submission is November 15, 2024. All abstracts must be submitted online at the conference website at <a href="https://www.magnetics.jp/icaums2025">https://www.magnetics.jp/icaums2025</a>. Abstracts sent via e-mail or regular mail will not be processed or acknowledged. The abstract format will be posted on the Conference website. Authors will be informed of the status of their submission via e-mail by end of December, 2024.

#### 3. Presentation

Contributed papers accepted for the Conference will be presented either orally or as posters. Authors are requested to indicate their preference for oral or poster presentation during the online submission process. The Program Committee will make the final decision on the assignment of papers to sessions and the presentation format for each session. Authors will be notified of their session type in their acceptance e-mail.

Contributed oral presentations will be 10-minute talks, followed by a 4-minute discussion period. Authors are expected to bring their presentation on a laptop computer, along with a backup copy on a USB drive in case of laptop failure.

Poster presentations will consist of well-prepared visual materials about the work posted on an assigned board, with the author available to present details and answer questions during the designated poster session. Migaku Award will be given to the outstanding poster presentations by students. Further instructions will be posted to the Conference website.

#### 4. Publication

All authors of invited and contributed papers who present their work at the Conference are eligible to submit manuscripts for publication in one of journals of AUMS member societies. The details will be updated in the near future.

#### 5. Registration

Advance online registration at reduced rates will be available until March 17, 2025. Online registrations after March 18, 2025 and on-site registrations are accepted

only at the higher rates.

#### 6. Venue

The IcAUMS 2025 will be held at the Okinawa Convention Center (OCC) located in Ginowan city, on the west coast of central Okinawa island.

OCC is the largest multi-function complex in the prefecture with a theater, exhibition hall, and 12 large and small conference rooms.

OCC is adjacent to a beach, marina, seaside park, and an open-air amphitheater.

More information about the OCC can be found here: <a href="http://www.oki-conven.jp/en/">http://www.oki-conven.jp/en/</a>

#### 7. Exhibits

Corporate exhibition space will be available during the IcAUMS 2025 conference. This is a great opportunity to showcase your products and technologies to leading researchers, engineers and students with a broad range of interests in magnetism, magnetic materials and their applications. Exhibits will include instrumentation, process tools, materials and other associated technologies and products.

Corporate exhibits by overseas companies are also welcome. For more information, please refer to the Conference website.

### 8. Reception and Bierstube

Conference general attendees are invited to attend an official reception on Tuesday, April 22, from 6:00-8:00 pm. The reception will be held at the neighboring Laguna Garden Hotel. You will enjoy the authentic taste of Okinawan food and, of course, there will be a great selection of local beers and liquors.

Also, join us on evenings from 5:00 -7:00 pm for a taste of the best local beers as you network among the poster sessions and corporate exhibits.

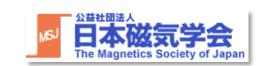
#### 9. VISA Requirements

Citizens of countries other than Japan must carry a valid passport to enter Japan. Participants requiring visas should contact the Japanese Embassy, Consulate, or Office of Tourism in their home country as soon as possible to determine their particular visa requirements. The application process for a visa should be commenced well before the start of the conference (preferably two months, or more).

The Secretariat can issue a signed Invitation Letter and other necessary documents to those participants who have completed both the registration and payment, and need a visa. For more information, please check the Conference website.

Please note that the IcAUMS 2025 Secretariat cannot contact or intervene with any Japanese Embassy or





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Consulate office abroad on your behalf. Also, please note that the Invitation Letter does not imply a commitment from the conference organizers to provide any form of financial support.

The following page contains more information about visa requirements for Japan: If anything is not clear please contact your nearest Japanese Embassy or Consulate for advice. https://www.mofa.go.jp/j info/visit/visa/index.html

#### 10. Getting to Tropical Paradise, OKINAWA

Naha Airport (OKA) serves the main island of Okinawa. Direct, international flights are available from many Asian cities, such as Beijing, Seoul, Taipei, Bangkok, Singapore etc. From within Japan flights to Naha airport are available from all major Japanese airports, such as Tokyo (Narita and Haneda), Osaka (Kansai and Itami), Nagoya, Fukuoka, Sendai etc.



#### **Temperature**

Spring brings beach season, with many of Okinawa's most popular resort beaches opening for swimming in March. The days are generally hot, with notable temperature dips in the evenings. The average temperature in April is 21.5°C.

#### Reference

Website of VISIT OKINAWA JAPAN <a href="https://www.visitokinawa.jp/about-okinawa/overview-of-okinawa">https://www.visitokinawa.jp/about-okinawa/overview-of-okinawa</a>





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#### 11. Important Dates

Abstract Deadline	November 15 <sup>th</sup> (Fri.), 2024
Abstract Acceptance Notification	December 27 <sup>th</sup> (Fri.), 2024
Manuscript Submission Periods	ТВА
Early Registration Deadline	March 17 <sup>th</sup> (Mon.), 2025
Conference Days	April 21 <sup>st</sup> (Mon.)– 24 <sup>th</sup> (Thu.), 2025



