

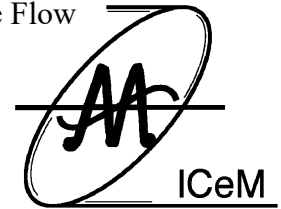


The International Information Center for Multiphase Flow

NEWSLETTER

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The Japanese Society for Multiphase Flow



The 13th Korea-Japan Symposium on Nuclear Thermal Hydraulic and Safety (NTHAS-13) November 10 (Sun) – 13 (Wed) 2024, Seoul, Korea

by Yoshihisa NISHI

The NTHAS has been held biennially, alternating between Japan and Korea, for more than 20 years since the first symposium was held in Pusan, Korea, in 1998 by the Thermal Hydraulics Division of AESJ in Japan and KNS in Korea. The conferences have been very successful in terms of technical quality and number of participants, providing a unique opportunity to discuss the latest technical information from Japan and Korea and interact with colleagues from neighboring countries.

NTHAS-12, scheduled for 2020, had to be postponed several times due to the global COVID-19 corona pandemic, but was held in Miyazaki, Japan in 2022 in a FACE-TO-FACE format and was a great success.

In response to this history, NTHAS-13 was held from November 10 to 13, 2024, at the Hotel Naru

Seoul-MGGallery in Seoul, Korea. A total of 231 participants (57 from Japan, and 174 from Korea) attended the symposium, and 154 papers were presented in addition to 2 plenary lectures and 4 keynote lectures.

The two Plenary lectures were presented by two speakers from Japan and Korea, respectively, totaling four lectures, introducing the approaches to thermal hydraulics and safety, fundamentals of thermal hydraulics, and the development of next-generation reactors.

The four keynote lectures were also presented by two from Japan and two from Korea, and introduced light water reactor thermal hydraulics, reactor structural integrity, molten salt reactor experiments and analysis, and innovative reactor development.

The technical sessions were grouped into the following 12 categories. These technical sessions, along

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Photo 1 Group photo, <https://lee2097.wixsite.com/mysite>

with the three poster sessions, provided three days of lively discussions.

- Thermal Hydraulics Fundamentals
- Two-Phase Flow Experiments and Analysis
- Code Development and V&V
- Non-water Reactor Thermal Hydraulics and Safety
- Computational Fluid Dynamics and Heat Transfer
- Severe Accident Experiments and Analysis
- Advanced Reactor Thermal Hydraulics and Safety
- Instrumentation and Measurement Techniques
- Water Reactor Thermal Hydraulics and Safety
- CHF and Post-CHF Heat Transfer
- Thermal Hydraulic Aspects of Plant Operation
- AI Application to Thermal Hydraulics and Safety

It is well-known that innovative researches have been conducted in the field of nuclear engineering, in particular, the two-phase flow modeling. Also in NTHAS-13, some remarkable presentations (lectures) were performed. First of all, Prof. Kataoka made a plenary lecture about the basic equations of two-phase flow. The keynote lecture about boiling flow experiments and simulations by Prof. Kim was also impressive. In technical sessions, notable researches were presented about flows with phase-change, particulate floss, extreme flows in severe accident, CFDs for various two-phase flows, etc.

During the closing session on the last day, it was announced that the next NTHAS-14 will be held in Japan in 2026, marking a successful conclusion to the conference.

The 9th KNS-AESJ Joint Summer School for Students and Young Researchers was also held at Seoul

National University prior to NTHAS-13. 26 participants (17 from Korea, 9 from Japan, 2 lecturers, and 4 secretariats) joined to exchange information on the latest research.

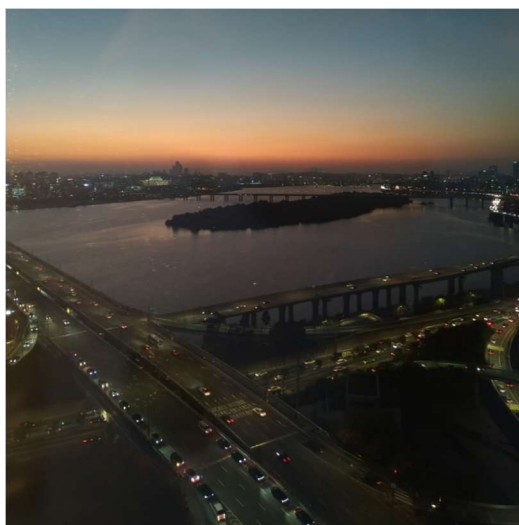


Photo 2 Han river view from conference place

Author's information

Yoshihisa NISHI

NTHAS-13 Technical Program Committee Chair
Central Research Institute of Electric Power Industry (CRIEPI)

y-nishi@criepi.denken.or.jp

Future Meetings

Following list includes conference name, place, date and contact information.

Japan-U.S. Seminar on Two-Phase Flow Dynamics 2025

Tokyo, Japan, June 2-5, 2025

Chair: Shuichiro Miwa(The University of Tokyo)

<https://www.vis.t.u-tokyo.ac.jp/jus2025/>

21th International Symposium on Flow Visualization(ISFV21)

Tokyo, Japan, June 21–25, 2025

Chair: S. Someya (Tokyo Denki University)

<https://www.isfv21.org/index.html>

10th International Conference on Discrete Element Methods(DEM10)

Himeji, Japan, July 1–5, 2025

Chair: M. Sakai (The University of Tokyo)

<https://www.sptj.jp/dem10/>

Summer Heat Transfer Conference(SHTC2025)

Westminster, Colorado, July 8–10, 2025

Chair: S. Boetcher (Embry-Riddle Aeronautical University)

<https://event.asme.org/SHTC>

12th International Conference of Fluid Flow, Heat and Mass Transfer (FFHMT 2025)

London, United Kingdom, July 15–17, 2025

Chair: B. Kruczek (University of Ottawa)

<https://ffhmt.com/>

11th International Symposium on Turbulence, Heat and Mass Transfer(THMT25)

Tokyo, Japan, July 21–25, 2025

Chair: K. Suga (Osaka Metropolitan University),

<https://www.thmt-25.org/>

12th International Conference on Heat Transfer and Fluid Flow (HTFF 2025)

Paris, France, August 19–21, 2025

Chair: H. Qui (The Hong Kong University of Science & Technology)

<https://htffconference.com/>

21th International Topical Meeting on Nuclear Reactor Thermal Hydraulics(Nureth-21)

Busan, Republic of Korea, August 31– September 5, 2025

Chair: C. Song (KAERI, Korea)

<https://www.ans.org/meetings/view-425/>

The Eleventh JSME-KSMEThermal and Fluids Engineering Conference(J-K TFEC11)

Okinawa, Japan, October, 22-25, 2025

Chair: Atsuki Komiya(Tohoku University), Jung-Il Choi(Yonsei University)

<https://tfec11.jp/>

The 13th International Symposium on Measurement Techniques for Multiphase Flows(ISMTMF2025)

Dalian, China, October, 25-27, 2025

Chair: Mao Ye(Chinese Academy of Sciences), Yuichi Murai(Hokkaido University)

<https://ismtmf2025.scimeeting.cn>

22nd International Conference on Flow Dynamics 2025

Sendai, Japan, November, 10-13, 2025

General Co-chair: Makoto Ohta(Tohoku University), Vincent Fridrici(Centrale Lyon)

<https://www.ifs.tohoku.ac.jp/icfd/2025/index.html>

11th International Conference on Experimental and Numerical Flow and Heat Transfer(ENFHT2026)

Paris, France, April 14-16, 2026

Chair: Lixin Cheng(Sheffield Hallam University)

<https://enfht.com/>

10th World Congress on Particle Technology (WCPT10)

Osaka, Japan, May 11–14, 2026
Chair: T. Matsuyama (Soka University)

<https://www.showsbee.com/fairs/World-Congress-on-Particle-Technology.html>

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Executive Office of JSMF
Academic Publication & Printings Co.
2-14-9 Kasugadenaka, Konohana-ku, Osaka, 554-0022, JAPAN
Tel : +81-6-6466-1588 Fax : +81-6-6463-2522
E-mail : office@jsmf.gr.jp
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