

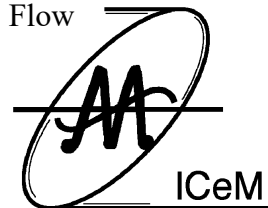


The International Information Center for Multiphase Flow

NEWSLETTER

No. 57, September 2022

The Japanese Society for Multiphase Flow



Japan-U.S. Seminar on Two-Phase Flow Dynamics 2022 May 8-12, 2022, Online.

by Yuichi MURAI

Japan-U.S. Seminar on Two-phase Flow Dynamics 2022 (JP-US STPF2022) was held during May 8-11 in U.S. or May 9-12 in Japan, 2022, upon online. The seminar was chaired by Prof. Steven Ceccio (University of Michigan), co-chaired by Prof. Yuichi Murai (Hokkaido University), program-chaired by Prof. Xiaodong Sun (University of Michigan), program-co-chaired by Prof. Shuichiro Miwa (The University of Tokyo), and honorary chaired by Prof. Mamoru Ishii (Purdue University). The seminar was organized by College of Engineering, University of Michigan, co-organized by The Japanese Society of Multiphase Flow, and sponsored by LaVision, Inc., and Department of Nuclear Engineering and Radiological Sciences, College of Engineering, University of Michigan.

This collateral seminar is 12th edition since 1979, the year of nuclear power accident happened in Three-



Fig. 1 Snapshot of online seminar (max 58 people)

Mile Island. With this origin, the series of seminar has been dealing with two-phase flow problems mainly for nuclear reactor safety. Our seminar also contributed to the problem-solving for Fukushima Daiichi accidents happened in 2011. In the last decade, necessity of investigation for gas-liquid interfacial dynamics expanded in seeking solutions also for environmental problems. Calling experts working in these areas from

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both countries, the present seminar was programmed to discuss future perspectives of research from thermo-fluid physics of two-phase flow to engineering designs of various practical devices. We had the following technical sessions in the present seminar; bubble motion, drag and flow mixing, two-phase experiments, cavitation and its application, drag reduction, advanced instrumentation and measurement techniques, CHF and boiling heat transfer, and two-phase flow in rod bundle.

The seminar had 19 presentations from Japan and 23 from U.S. with the plenary lecture by Prof. Mamoru Ishii (Purdue University) and three keynotes by Prof. Yuka Iga (Tohoku University), Dr. J.R. Buchanan, Jr. (Naval Nuclear Laboratory), and Prof. Tomio Okawa (The University of Electro Communications). Ongoing nationwide research program in U.S. and Japan were presented by Prof. Gretar Tryggvason (Johns Hopkins University) and Prof. Yuichi Murai (Hokkaido University), respectively. All the presentations were held in a single room on Zoom (Fig. 1). Furthermore, all the online participants enjoyed virtual laboratory tour (Fig. 2) visiting virtually to ten laboratories; Hokkaido University, Purdue University, Kobe University, University of Michigan, Kumamoto University, North Carolina State University, Shizuoka University,

Rensselaer Polytechnic Institute, and Muroran Institute of Technology. During the seminar, we had 58 people participation into the online seminar room in total connected from both countries.

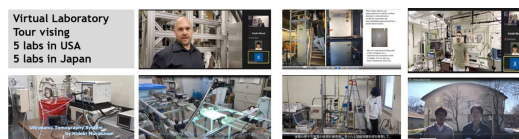


Fig. 2 Virtual laboratory tour visiting 10 labs.

The next Japan-U.S. Seminar will be held in Tokyo in 2025, chaired by Prof. Shuichiro Miwa (The University of Tokyo). I look forward to seeing many of you there.

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Future Meetings

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

19th Internatinal Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-19)

Brussels, Belgium, March 6 – 11, 2022

Chair: H.A. Abderrahim (SCK, CEN), J-P, Chabard (EDF), X. Sun (University of Michigan)

<https://www.ans.org/meetings/view-334/>

The 7th International Conference on Jets, Wakes and Separated Flows 2022

Full-Online, March 15 - 17, 2022

Chair: K. Kimura (Nihon University)

<http://www.mech.cst.nihon-u.ac.jp/ICJWSF2022/>

The 32th International Symposium on Transport Phenomena (ISTP32)

Tianjin, China, March 19-21, 2022

Chair: Y. Utaka (Tianjin University)

<https://istp32.scimeeting.cn/en/web/index/>

7th Thermal and Fluids Engineering Conference(Hybrid)

Online virtual and in person, Las Vegas, USA, May 16 – 18, 2022

Char: D. W. Pepper (University of Nevada)

<http://www.astfe.org/tfec2022/>

Japan-U.S. Seminar on Two-Phase Flow Dynamics 2022

Michigan, USA, May 8 – 11, 2022

Chair: S. Ceccio (University of Michigan)

<https://usjapanseminar.engin.umich.edu/>

7th Thermal and Fluids Engineering Conference (TFEC 2022)

Las Vegas, Nevada, United States, May 15–18, 2022

Chair: D.W. Pepper (University of Nevada)

<https://www.astfe.org/tfec2022/>

13th International Conference on Thermal Engineering: Theory and Applications

Baku, Azerbaijan, May 22 - 24, 2022

Chair: Y. Abdullayev (Baku Engineering University),

M.Z. Saghir (Ryerson University)

<https://www.ictea.ca/>

10th International Conference on Conveying and Handling of Particulate Solids(CHOPS2022)

Salerno, Italy, July 5 - 9, 2022

Chair: M. Poletto and D. Barletta (University of Salerno)

<https://www.chops2022.it/>

20th International Symposium on Applications of Laser and Imaging Techniques to Fluid Mechanics

Lisbon, Portugal, July 11 - 14, 2022

Organizing Committee: E.Longmire(University of Minnesota), Y. Murai, (Hokkaido University), M. Panão, (University of Coimbra), C. Tropea(Technical University of Darmstadt)

<http://www.lisbon-lasersymposium.org/lxlaser2022>

Twelfth International Symposium on Turbulence and Shear Flow Phenomena (TSFP12)

Osaka, Japan, July 19-22, 2022

Chair: H.J. Sung, Korea Advanced Institute of Science and Technology (KAIST)

<https://www.tsfp12.org/index.html>

The 13th Pacific Symposium on Flow Visualization and Image Processing (PSFVIP13)

Shinjuku, Tokyo, August 7 - 10, 2022

Chair: Yokono Yasuyuki(The Univesity of Tokyo), Someya Satoshi(AIST)

<https://psfvip13.org/index.html>

29th International Conference on Nuclear Engineering (ICONE 29)

Shenzhen, China, August 8 - 12, 2022

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

13th International Topical Meeting on Reactor Thermal-Hydraulics, Operation, and Safety (NUT-HOS-13)

Taichung, Taiwan, September 4 - 9, 2022

Chair: M. Lee (National Tsing Hua University)

<https://www.ans.org/meetings/view-348/>

World Congress of Particle Technology

Madrid, Spain, September 18–22, 2022
Congress Chair: C. Negro (University Complutense of Madrid)
<https://wcpt9.org/>

12th Japan-Korea Symposium on Nuclear Thermal Hydraulics and Safety (NTHAS12)

Miyazaki, Japan, October 30 - November 2, 2022
General Chairs: Prof. Yutaka Abe (Univ. Tsukuba), Prof. Jae Jun Jeong (PNU)
<https://www.nthas12.org/index.html>

16th International Conference on Fluid Control, Measurements, and Visualization (FLUCOME 2022)

Beijing, China, 2022
Chair: J. Wang (Beihang University)
<http://tlx.buaa.edu.cn/FLUCOME2021/Home.htm>

----- 2023 and beyond, not yet determined -----

The 11th International Conference on Multiphase Flow (ICMF 2023)

Kobe, Japan, April 2 - 7, 2023
Chair: A. Tomiyama (Kobe University)
<http://www.jsmf.gr.jp/icmf2022/>

30th International Conference on Nuclear Engineering (ICONE 30)

Kyoto, Japan, May 21 - 25, 2023
<https://www.icone30.org/>

ASME - JSME - KSME Joint Fluids Engineering

Conference 2023

Osaka, Japan, June 9 - 13, 2023
<https://www.jsme.or.jp/event/23-202/>

26th International Conference on Chemical Thermodynamics (ICCT-2023)

Osaka, Japan, July 30–August 4, 2023
Chair: K. Saito (Tsukuba University)
<https://www.chem.sci.osaka-u.ac.jp/lab/micro/ICCT2023/pg80.html>

European Conference on Thermophysical Properties (ECTP 2023)

Venice, Italy, September 10-13, 2023
Chair: A. Muscio (AIPT / Univ. Modena e Reggio Emilia)
<https://www.ectp2023.eu/>

14th International Symposium on Ultrasonic Doppler Methods for Fluid Mechanics and Fluid Engineering

Kobe, Japan, October, 23-25, 2023
<https://www.isud-conference.org/>

Particle growth in turbulence

Stockholm, Sweden, Postponed
Chair: A. Brandenburg (Nordita)
Chair: B. Mehlig (University of Gothenburg)
<https://www.nordita.org/events/particles2020/>

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