

OS19: Multiphase Thermal Fluid Flow and Its Interface Dynamics

November 10, 2025

EX-3A

- OS19-1 **Making Melting More Complicated (*Invited*)**
13:30-14:10 Sander G. Huisman (University of Twente, The Netherlands)
- OS19-2 **Evaporation-Induced Freezing Dynamics of Droplets Levitated in Acoustic Field**
14:10-14:30 Koji Hasegawa, Misaki Mitsuno (Kogakuin University, Japan), Xiao Ma (National Maritime Research Institute, Japan)
- OS19-3 **Scale Estimation of Defect-Free and Striated Regions in Solidification during Molten Metal Drop Impact**
14:30-14:50 Minori Shiota, Takahiro Okabe, Taimei Miyagawa, Yuma Yamagami, Ryusei Sugita (Hirosaki University, Japan)
- 15:00-15:15 BREAK
- OS19-4 **Molecular Dynamics Simulation of Near-Wall Bubble Collapse Induced by Shock Wave**
15:15-15:35 Keita Moriyama, Takanori Mori, Satoshi Watanabe, Shin-ichi Tsuda (Kyushu University, Japan)
- OS19-5 **Three-Dimensional Numerical Simulation of Microchannel Taylor Bubble: Effects of Internal Flow Structures on Liquid Film Formation**
15:35-15:55 Daisuke Tsuneoka, Junnosuke Okajima (Tohoku University, Japan)
- OS19-6 **Investigation of Wide Temperature Range Flow Regimes and Lubricating Film Properties in Rotating Disc**
15:55-16:15 Chunhui Wei (Beijing Institute of Technology, China / INSA-Lyon, France), Daniel Nelias, Valery Botton (INSA-Lyon, France), Wu Wei, Yi Liu (Beijing Institute of Technology, China)
- OS19-7 **Numerical Study of Microlayer Formation and its Dynamics During Nucleate Boiling of Dielectric Liquid**
16:15-16:35 Junnosuke Okajima, Hikaru Ishibashi, Koki Ota (Tohoku University, Japan), Peter Stephan (Technical University of Darmstadt, Germany)
- 16:45-17:00 BREAK
- OS19-8 **Results of Experimental Studies and Modeling Concerning the Asymmetry of Liquid Film Thickness for Different Tube Diameters**
17:00-17:20 Andrzej I. Nowak, Tomasz Duraziński (Wrocław University of Science and Technology, Poland), Daisuke Tsuneoka, Junnosuke Okajima (Tohoku University, Japan)
- OS19-9 **Thermal Performance of Boron-Based Nanofluid in a Battery Thermal Management System**
17:20-17:40 Bilal Kursuncu, Abid Ustaoglu, Ferhat Yıldız (Bartın University, Turkey), Junnosuke Okajima (Tohoku University, Japan)

November 11, 2025

EX-3A

- OS19-10
13:30-13:50 **Pressure Estimation of Acoustic and Shock Waves through Calibrated Schlieren Imaging**
Gianmaria Viciconte, Paolo Guida, Tadd T. Truscott, William L. Roberts (King Abdullah University of Science and Technology (KAUST), Saudi Arabia)
- OS19-11
13:50-14:10 **Bubbly Shock Waves Characterization in Aerated Cavitating Flows in Water and Dodecane via Computer Vision Tools**
Elad Zur, Igal Gluzman (Israel Institute of Technology, Israel)
- OS19-12
14:10-14:30 **Is There a Chance to Absorb Atmospheric Moisture for an Evaporating Methanol Drop?**
Ajay Kumar Mannem, Deepak Kumar Mandal (Indian Institute of Technology Dhanbad, India)
- OS19-13
14:30-14:50 **Visualization Investigation of the Methanol/Diesel Spray-To-spray Impingement Characteristics**
Yuming Zhang, Zunhua Zhang, Dongsheng Dong, Gesheng Li, Xinyu Xie (Wuhan University of Technology, China)
- 15:00-15:15 BREAK
- OS19-14
15:15-15:35 **Experimental Investigation of Drops Gyration on Heated Surfaces with Asymmetric Wettability**
Hiroto Kurita, Takahiro Okabe (Hirosaki University, Japan)
- OS19-15
15:35-15:55 **Condensation-Induced Non-Contact Bouncing Failure**
Guillaume Deschasaux, Jiaying Shen, Yuki Serata (The University of Tokyo, Japan), Mizuki Tenjimbayashi (National Institute for Materials Science, Japan), Timothée Mouterde (The University of Tokyo, Japan)
- OS19-16
15:55-16:15 **Evaluation of Viscous Dissipation with Rim Development in Drop Impact**
Tousei Kishi, Takumu Yamaya, Taimei Miyagawa, Minoru Shirota (Hirosaki University, Japan)
- OS19-17
16:15-16:35 **Dominant Role of Solid Particles in Drop-Impact Heat Transfer**
Taku Sakurai, Kento Kudo, Minoru Shirota, Takahiro Okabe (Hirosaki University, Japan)