OS13: Flow Realization, Measurement and Visualization

October 29, 2020
ROOM7 (Zoom Webinar)

OS13-1
9:20-9:40

Impact of Conditions of Gas and Liquid on Marangoni Convection in Meniscus Region under IPA Vapor in Wafer Drying Process
Shumpei Miura (Shibaura Institute of Technology, Japan), Tomoatsu Ishibashi, Hisanori Matsuo, Katsuhide Watanabe (Ebara Corporation, Japan), Naoki Ono (Shibaura Institute of Technology, Japan)

OS13-2
9:40-10:00

Numerical Simulation on the Effects of Aspect Ratio of Small Swimming Object's Fin Fold on its Propulsion Performance
Tatsuya Bamba, Tomohiro Fukui, Koji Morinishi (Kyoto Institute of Technology, Japan)

OS13-3
10:00-10:20

Effect of the Meandering of Large-Scale Motions on Bursting Phenomenon in Turbulent Boundary Layer
Xiaonan Chen, Koji Iwano, Yasuhiko Sakai, Yasumasa Ito (Nagoya University, Japan)

OS13-4
10:20-10:40

Preliminary Analysis of Balance System for a Small Cryogenic Wind Tunnel in NDA
Thai Duong Nguyen, Masashi Kashitani, Masato Taguchi (National Defense Academy of Japan, Japan), Hiroaki Ono (Tsukuba University, Japan)

OS13-5
11:10-11:30

Application of MZI for Square Underexpanded Microjets
Tatsuya Sakanashi, Shinichiro Nakao, Yoshiaki Miyazato (The University of Kitakyushu, Japan), Yojiro Ishino (Nagoya Institute of Technology, Japan)

OS13-6
11:30-11:50

Application of High-Speed MZI for Transonic Diffuser Flows
Taiju Naka, Shinichiro Nakao, Yoshiaki Miyazato (The University of Kitakyushu, Japan)

OS13-7
11:50-12:10

Application of RSD for Axisymmetric Underexpanded Microjets
Ryota Fukunaga, Shinichiro Nakao, Yoshiaki Miyazato (The University of Kitakyushu, Japan), Yojiro Ishino (Nagoya Institute of Technology, Japan)

OS13-8
12:10-12:30

POD-based Spatio-temporal Superresolution Measurement on a Supersonic Jet with a Mach Number of 2.0 using a PIV and a Near-field Acoustic Measurements
Yuta Ozawa, Taku Nonomura, Keisuke Asai (Tohoku University, Japan)

OS13-9
13:30-13:50

Effect of Free Surface on Fluid Motion in Blade-Free Planetary Mixer
Takayuki Yamagata, Kota Sato (Niigata University, Japan), Nobuyuki Fujisawa (Niigata University / Shinshu University, Japan)

OS13-10
13:50-14:10

Measurement of Heat Transfer of a Sphere Moving on the Inclined Wall Using High-speed IR Thermography
Taimei Miyagawa, Takahiro Okabe, Hiroyuki Murata (Hirosaki University, Japan)

OS13-11
14:10-14:30
Development of Correction Method of Aliasing in Two-Dimensional Ultrasonic-Measurement-Integrated Blood Flow Analysis System based on Explicit Method
Seiichi Kimura, Suguru Miyauchi, Toshiyuki Hayase, Kosuke Inoue (Tohoku University, Japan)

OS13-12
14:30-14:50
Ultrasonic-Measurement-Integrated Blood Flow Analysis Based on Lagrange Multiplier Method: Application to an Unsteady Problem
Suguru Miyauchi, Toshiyuki Hayase (Tohoku University, Japan)

ROOM7 (Meet)　　***Change the online style from "zoom webinar" to "meet". ***

OS13-13
15:20-15:40
Ultrasonic Doppler Velocity Profiler (UVP) Based Pressure Field Estimation in Shear-thinning Fluid Flows
Neetu Tiwari, Yuji Tasaka, Yuichi Murai (Hokkaido University, Japan)

OS13-14
15:40-16:00
Improvement of Pressure Field Estimated from PIV Data by Irrotational Correction Schemes Based on Helmholtz Vector Decomposition
Neetu Tiwari, Yuichi Murai (Hokkaido University, Japan)

OS13-15
16:00-16:20
Two-phase Flow Regime Identification for a Circular Channel Using K-means Clustering Technique
Yung-Ming Hsu, Shao-Wen Chen, Min-Song Lin, Yen-Shih Cheng, Pei-Syuan Ruan, Jin-Der Lee, Bau-Shei Pei (National Tsing Hua University, Taiwan)

OS13-16
16:20-16:40
Flow Regime Classification for Upward Two-phase Flow in a Rectangular Tube under Vibration using K-means Clustering
Li-Tung Wu, Shao-Wen Chen, Yu-Hsien Chang, Min-Lun Chai, Pei-Syuan Ruan, Yung-Ming Hsu (National Tsing Hua University, Taiwan)