

OS13: Flow Realization, Measurement and Visualization

November 10, 2022

EX-4-B

- OS13-1 **Calibration Test of Binders for the PSP Measurement using MACOR® and Ceramic Compounds**
9:00-9:15 Kota Sasaki, Nobuyoshi Fujimatsu (Toyo University, Japan)
- OS13-2 **Image Alignment Method for Pressure-Sensitive Paint Measurement Without Using Black Markers**
9:15-9:30 Kyosuke Suzuki, Tomoki Inoue (Waseda University, Japan), Takayuki Nagata, Miku Kasai, Taku Nonomura (Tohoku University, Japan), Yu Matsuda (Waseda University, Japan)
- OS13-3 **Proposal of PSP Measurement Method Under Ambient Light**
9:30-9:45 Rio Tanaka, Satoshi Katayama (Waseda University, Japan), Tsubasa Ikami (Tohoku University, Japan), Yasuhiro Egami (Aichi Institute of Technology, Japan), Hiroki Nagai (Tohoku University, Japan), Yu Matsuda (Waseda University, Japan)
- OS13-4 **Flow Topology on the Ahmed Body with a Deflector by a Sub-grid Global Skin-Friction Measurement Method**
9:45-10:00 The Hung Tran (Kyushu University, Japan / Le Quy Don Technical University, Vietnam), Masato Hijikuro, Masayuki Anyoji, Takanori Uchida (Kyushu University, Japan), Takuji Nakashima (Hiroshima University, Japan), Keigo Shimizu (Mazda Motor Corporation, Japan)
- OS13-5 **Study on the Flow Field Around a Pitching Cylinder with a Bi-Conic Nose Cone Using a 1-DoF Wind Tunnel Test Model**
10:00-10:15 Ryota Tamai (The University of Tokyo, Japan), Satoshi Nonaka, Kimihide Odagiri, Hiroyuki Ogawa (Japan Aerospace Exploration Agency, Japan)
- OS13-6 **Modal Decomposition of Fluid Motion in Blade-Free Planetary Mixer**
10:40-10:55 Takayuki Yamagata, Tsubasa Igarashi (Niigata University, Japan)
- OS13-7 **Numerical Investigation of Aerosol Blocking Effect by Desktop Air Curtain Device**
10:55-11:10 Hiromasa Muto, Kotaro Takamure, Daisuke Kobayashi, Taketo Haruki, Hiroshi Amano (Nagoya University, Japan), Tetsuya Yagi (Nagoya University Hospital, Japan), Yasumasa Iwatani (Nagoya Medical Center, Japan), Tomomi Uchiyama (Nagoya University, Japan)
- OS13-8 **Experimental Investigation of Aerosol Blocking Effect by Desktop Air Curtain Device**
11:10-11:25 Daisuke Kobayashi, Hiromasa Muto, Taketo Haruki, Kotaro Takamure, Hiroshi Amano (Nagoya University, Japan), Tetsuya Yagi (Nagoya University Hospital, Japan), Yasumasa Iwatani (Nagoya Medical Center, Japan), Tomomi Uchiyama (Nagoya University, Japan)

- OS13-9 **Flying Yeast: Aerosol Particles Released during the Fermentation**
11:25-11:40 Ryoji Onishi, Kenji Kikuchi, Takuji Ishikawa (Tohoku University, Japan)
- OS13-10 **Direct Skin Friction Measurement on Hypersonic Models**
13:10-13:25 Shamim Pathan, Maitri Kshetrimayum, Viren Menezes, Chandra Sekher Yerramalli (Indian Institute of Technology Bombay, India)
- OS13-11 **Investigation of Draft Tube Shape for a Cross-flow Turbine with Guide Wall and Cavity**
13:25-13:40 Toru Sakai, Yoshikazu Hayashi, Shouichiro Iio (Shinshu University, Japan), Takaya Kitahora (Shonan Institute of Technology, Japan), Young-Do Choi (Mokpo National University, Korea), Morihito Inagaki (JSE Co., Ltd., Japan)
- OS13-12 **Influence of the Nozzle Disk and Runner Clearance on Noise and Performance of a Submerged Impulse Turbine**
13:40-13:55 Seisei Rin, Takahiro Saito, Shouichiro Iio (Shinshu University, Japan), Daisuke Tsunashima (Chuetsu Kogyo Inc, Japan)
- OS13-13 **Investigation of the Flow Field around a Guide Vane in a Cross-flow Turbine at Partial Load Operation**
13:55-14:10 Kazuhiro Aiba, Mitsuteru Fujimori, Kota Otsuka, Shouichiro Iio (Shinshu University, Japan)
- OS13-14 **Measurement of Lagrangian Acceleration in Two-dimensional Channel Flow using Dynamic-hue Particle Tracking Velocimetry**
14:10-14:25 Xin Song, Takato Okuda, Masaya Iwanaga, Souta Yamauchi, Kentaro Kato, Masaharu Matsubara (Shinshu University, Japan)
- OS13-15 **Development of a Simultaneous Measurement Method for Volumetric Flowrates of Each Phase of Gas-Liquid Two-Phase Flow**
14:50-15:05 Shogo Miyamoto, Yasuaki Sakamoto, Kosuke Horie, Tomomi Uchiyama, Kotaro Takamure (Nagoya University, Japan), Hiroshi Nakayama (Chubu Electric Power Co., Inc., Japan)
- OS13-16 **Collection Performance of Oil Mist in T-shaped Mist Trap**
15:05-15:20 Shogo Ando, Kotaro Takamure, Tomomi Uchiyama (Nagoya University, Japan), Hiroshi Nakayama (Chubu Electric Power Co., Inc., Japan)
- OS13-17 **Flow Regime Classification for Upward Two-phase Flow in a Rectangular Tube using Unsupervised Learning**
15:20-15:35 Han-Yao Chen, Shao-Wen Chen, Yung-Ming Hsu, Li-Tung Wu (National Tsing Hua University, Taiwan)
- OS13-18 **Flow Regime Identification for Air-Water Two-phase Flow in a 3×3 Rod Bundle by K-means Clustering**
15:35-15:50 Hsin-Ju Lee, Shao-Wen Chen, Lung-Hung Huang, Pei-Syuan Ruan, Min-Song Lin (National Tsing Hua University, Taiwan)

- OS13-19 **Holding a Stable Air-Liquid Interface in Helix Structures**
15:50-16:05 Guan-Yu Lu, Faisal Maqbool (National Chung Hsing University, Taiwan),
Yi-Yu Chen, Wei-Hsin Tien (National Taiwan University of Science and
Technology, Taiwan), Ya-Yu Chiang (National Chung Hsing University,
Taiwan)
- OS13-20 **RANS Simulations of Elliptic Underexpanded Sonic Jets**
16:30-16:45 Tatsuya Nagata, Shinichiro Nakao, Yoshiaki Miyazato (The University of
Kitakyushu, Japan)
- OS13-21 **RANS Simulations of Rectangular Underexpanded Microjets**
16:45-17:00 Shota Yoshimi, Shinichiro Nakao, Yoshiaki Miyazato (The University of
Kitakyushu, Japan)
- OS13-22 **Study of Microjet Structure from Axisymmetric Supersonic Nozzles**
17:00-17:15 Tenta Tashiro, Shinichiro Nakao, Yoshiaki Miyazato (The University of
Kitakyushu, Japan), Yojiro Ishino (Nagoya Institute of Technology, Japan)
- OS13-23 **Unsteady Characteristics of Shock Trains in Constant-Area Straight Ducts**
17:15-17:30 Takato Inadomi, Shinichiro Nakao, Yoshiaki Miyazato (The University of
Kitakyushu, Japan)