

OS13: Flow Realization, Measurement and Visualization

November 8, 2023

EX-4-A

- OS13-1 **Unsupervised Flow Regime Analysis of 3x3 Rod Bundle Two-phase Flow and Calibration Experiment of Full Section**
9:00-9:15 Wen-Chen Tsai, Shao-Wen Chen, Lung-Hung Huang, Pei-Syuan Ruan, Min-Song Lin (National Tsing Hua University, Taiwan)
- OS13-2 **Feasibility Study on Identifying Bubbly Flow Boundary in Narrow Rectangular Tube Using Probability Density Plots**
9:15-9:30 Yi-Hsuan Lin, Shao-Wen Chen, Han-Yao Chen (National Tsing Hua University, Taiwan)
- OS13-3 **Visualization of Temperature Distribution of Cavitation Collapse Bubbles in Automotive Transmission Oil**
9:30-9:45 Ryuichi Shiozawa, Shumpei Funatani (University of Yamanashi, Japan)
- OS13-4 **Flow Visualization and Characterization of Capillary Waves using a Novel Optical Method**
9:45-10:00 Vineet Vishnu Mukim, Rune Wigoo Time, Andrianifaliana Herimonja Rabenjafimanantsoa (University of Stavanger, Norway)
- OS13-5 **PIV Measurement of the Wake of Sphere with a Uniaxial Through-hole**
10:00-10:15 Daisuke Kobayashi, Sota Tsukamoto, Tomomi Uchiyama, Kotaro Takamure (Nagoya University, Japan)
- OS13-6 **Particle Collection Characteristics of a Prismatic Two-stage Electrostatic Precipitator**
10:15-10:30 Takeo Haruki, Shogo Ando (Nagoya University, Japan), Tetsuya Yagi (Nagoya University Hospital, Japan), Hiroshi Amano (Nagoya University, Japan), Yasumasa Iwatani (Nagoya Medical Center, Japan), Kotaro Takamure, Tomomi Uchiyama (Nagoya University, Japan)
- OS13-7 **Influence of the Edge Curvature Connecting Between the Cavity and Guide Wall on Cross-Flow Turbine**
10:40-10:55 Yuki Kuroda, Hiroto Tatsumi, Toru Sakai, 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)
- OS13-8 **Relationship between Inlet Flow Conditions and Cross-flow Turbine Performance**
10:55-11:10 Ken Suzuno, Mitsuteru Fujimori, Kazuhiro Aiba, Ayuki Yamaguchi, Shouichiro Iio (Shinshu University, Japan)
- OS13-9 **Analyzing the Impact of Operating Conditions on Energy Loss in a Cross-flow Turbine**
11:10-11:25 Ayuki Yamaguchi, Mitsuteru Fujimori, Kazuhiro Aiba, Ken Suzuno, Shouichiro Iio (Shinshu University, Japan)

- OS13-10 **Effect of Number of Blades on the Performance of a Waterfall Cross-Flow Hydro-Turbine**
11:25-11:40 Ko Moriya, Takayuki Yamagata (Niigata University, Japan), Nobuyuki Fujisawa (Shinshu University, Japan)
- OS13-11 **Development of a Micro-Pelton Turbine for Off-grid Power Generation**
11:40-11:55 Ryota Shirai, Shouichiro Iio (Shinshu University, Japan), Tatsuya Arai (Arai MFG, Co., Ltd., Japan)
- OS13-12 **Fluid Transport Mechanism in the Shark Nasal Cavity: Mechanics and Bionic Applications**
13:10-13:25 Yun-Hsin Lin, Meng-Yun Li, Zhe-Yi Su, Yi-Xiang Huang, Kai-Jung Chi (National Chung Hsing University, Taiwan), Ya-Yu Chiang (National Chung Hsing University / National Taiwan University, Taiwan)
- OS13-13 **Numerical Simulation of Hydrodynamic Interactions between Fish Body and Pectoral Fins**
13:25-13:40 Kotaro Morifusa, Tomohiro Fukui (Kyoto Institute of Technology, Japan)
- OS13-14 **Numerical Simulation of the Effects of the Figure-eight Flapping Motion of an Insect on the Aerodynamics**
13:40-13:55 Masato Yoshida, Tomohiro Fukui (Kyoto Institute of Technology, Japan)
- OS13-15 **Numerical Simulation of the Effects of External Oscillatory Flow on the Performance of Small Swimming Object.**
13:55-14:10 Kota Nakagawa, Tomohiro Fukui (Kyoto Institute of Technology, Japan)
- OS13-16 **The Effect of a Crater on the Velocity of Regolith Ejecta During Plume-Regolith Interactions**
14:10-14:25 Bradley Craig, Andrew Wilson (University of Glasgow, UK), Takahiro Ukai (Osaka Institute of Technology, Japan), Konstantinos Kontis (University of Glasgow, UK)
- OS13-17 **A Novel AI-Based Noise Removal Approach for Particle Streak Velocimetry Images**
14:25-14:40 Abdul Qadir, Thanh-Tung Vo, Meng-Kun Liu, Wei-Hsin Tien (National Taiwan University of Science and Technology, Taiwan)