

OS13: Flow Realization, Measurement and Visualization

October 27, 2021

ROOM6

- OS13-1 **Comparison of Three-dimensional Density Field of Numerical and Experimental Analysis for Twin Jets**
9:20-9:35 Chungil Lee, Yuta Ozawa (Tohoku University, Japan), Takanori Haga (Japan Aerospace Exploration Agency, Japan), Taku Nonomura, Keisuke Asai (Tohoku University, Japan)
- OS13-2 **Experimental Study of Axisymmetric Supersonic Microjets by TGI**
9:35-9:50 Tenta Tashiro, Shinichiro Nakao, Yoshiaki Miyazato (The University of Kitakyushu, Japan), Yojiro Ishino (Nagoya Institute of Technology, Japan)
- OS13-3 **Study of Square Underexpanded Microjets**
9:50-10:05 Tatsuya Sakanashi, Shinichiro Nakao, Yoshiaki Miyazato (The University of Kitakyushu, Japan), Yojiro Ishino (Nagoya Institute of Technology, Japan)
- OS13-4 **Study of Underexpanded Free Jets**
10:05-10:20 Ryota Fukunaga, Shinichiro Nakao, Yoshiaki Miyazato (The University of Kitakyushu, Japan)
- OS13-5 **Supersonic Jet Flow Reconstruction By Optimized Sparse Sensors Based On Sensor Selection Method**
10:20-10:35 Neetu Tiwari, Yuta Ozawa, Taku Nonomura (Tohoku University, Japan)
- OS13-6 **Flow Characteristic of Cavitating Jet from a Small Orifice**
11:10-11:25 Kohei Terakawa, Shouichiro Iio (Shinshu University, Japan), Kotaro Takamura, Tomomi Uchiyama (Nagoya University, Japan)
- OS13-7 **Quantitative OH Concentration Measurement on Calibration Flat Flame Using Bi-directional OH(2,0) LIF**
11:25-11:40 Yasuhiro Higuchi (Tohoku University, Japan), Yoshio Nunome, Sadatake Tomioka, Takeo Tomita (Japan Aerospace Exploration Agency, Japan), Taku Kudo, Akihiro Hayakawa, Hideaki Kobayashi (Tohoku University, Japan)
- OS13-8 **Visualization Measurement of Aerosol Generated from Ultrasonic Scaler**
11:40-11:55 Kota Kato, Takayuki Yamagata, Naoki Takahashi, Syuhei Mineo, Koichi Tabeta (Niigata University, Japan)
- OS13-9 **Bubble induced Puffing Process of Fermenting Bread Dough**
11:55-12:10 Kyosuke Kimura, Kenji Kikuchi, Atul Srivastava, Keiko Numayama-Tsuruta, Takuji Ishikawa (Tohoku University, Japan)
- OS13-10 **Effect of Density of a Sphere Launched Vertically in Water on the Sphere Dynamics**
12:10-12:25 Kotaro Takamura, Tomomi Uchiyama (Nagoya University, Japan)

- OS13-11 **Design Parameters of the Nozzle for a Submerged Impulse Hydro Turbine**
 13:30-13:45 Serene Ong Hui Sze, Takahiro Saito, Shouichiro Iio (Shinshu University, Japan), Daisuke Tsunashima (Chuetsu Kogyo Inc., Japan)
- OS13-12 **Performance and Strength of Propeller Turbine Runner with Outer Ring**
 13:45-14:00 Takufumi Sawada, Ryota Morii, Shouichiro Iio (Shinshu University, Japan)
- OS13-13 **Pressure Fluctuation Generated at Overlapping Area of Nozzle Tip and Blade Gap in a Cross-flow Turbine**
 14:00-14:15 Mitsuteru Fujimori, Tom Tanaka, Kota Otsuka, Shoichiro Iio (Shinshu University, Japan)
- OS13-14 **Flow and Performance Characteristics of a Small Propeller Turbine with Outer Ring Under Various Operating Conditions**
 14:15-14:30 Ryota Morii, Takufumi Sawada, Shouichiro Iio (Shinshu University, Japan)
- OS13-15 **Flow Investigation in a Cross-flow Turbine for Partial Load Operation**
 14:30-14:45 Yoshikazu Hayashi, Naoto Ogawa, Takashi Kamijo, 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)
- OS13-16 **Performance of a Waterfall-type Cross-flow Hydraulic Turbine**
 14:45-15:00 Tianbo Wang, Hayato Shikama, Takayuki Yamagata (Niigata University, Japan), Nobuyuki Fujisawa (Shinshu University, Japan)
- OS13-17 **Improvement of Power Generation Efficiency of Self-powered IoT Turbine Flowmeter with NACA airfoil Shaped Blades and Central Axis Cone**
 15:20-15:35 Yasuaki Sakamoto, Tomomi Uchiyama, Kotaro Takamure (Nagoya University, Japan), Hiroshi Nakayama (Chubu Electric Power Co., Inc., Japan)
- OS13-18 **Experiment on Fluid Force and Wake Characteristics of Basic Airfoils at Very-Low Reynolds Numbers**
 15:35-15:50 Keiichiro Hamaguchi, Ryoichi Takata (Doshisha University, Japan), Takanori Uchida, Kenichiro Sugitani (Kyushu University, Japan), Hirochika Tanigawa (National Institute of Technology, Maizuru College, Japan), Takashi Noguchi, Katsuya Hirata (Doshisha University, Japan)
- OS13-19 **Experimental Study of Vortex Shedding from a Sphere with a Uniaxial Through-hole in Uniform Flow**
 15:50-16:05 Hayato Kato, Kotaro Takamure, Tomomi Uchiyama (Nagoya University, Japan)
- OS13-20 **Study on Unsteady Flow Characteristics in Transonic Diffusers**
 16:05-16:20 Taiju Naka, Shinichiro Nakao, Yoshiaki Miyazato (The University of Kitakyushu, Japan)
- OS13-21 **The Simultaneous Visualization of Flow and Temperature inside a Pulsating Heat Pipe Using Temperature-sensitive Paint**
 16:20-16:35 Yuya Otaka, Keiko Ishii, Koji Fumoto (Aoyama Gakuin University, Japan)