

**OS1: The First International Symposium on Integrated Flow Science I & III**  
**Advanced Materials and its Energy Application**  
**&**  
**Multiphase Energy Science and Technology (Combination of Monozukuri-Fluid**  
**Science / Engineering)**

November 6, 2023  
CON-SHIRAKASHI 2

- OS1-1      **Mathematical Modeling of the Sensible Regions of Leaked Hydrogen Around a Flying Quad-Rotor Drone (*Invited*)**  
14:10-14:50    Kazuo Matsuura (Ehime University, Japan), Alisa Slabbinck Matsumoto (KU Leven, Belgium)
- OS1-2      **A Comparison of Solid Oxide Fuel Cell Performance on Ammonia Versus Hydrogen**  
14:50-15:10    Cole Wilhelm, Jeongmin Ahn (Syracuse University, USA)
- OS1-3      **Metal-Doped Fungi Biomass for Battery Electrode Material**  
15:10-15:30    Kassidy Fields, Cole Wilhelm, Jeongmin Ahn, Scott Erdman (Syracuse University, USA)
- OS1-4      **Optimal Operating Conditions for an Electric ECS in Ground Parking Status**  
15:50-16:10    Yuto Amano (Akita University, Japan), Hidefumi Saito (Shimadzu co. ltd., Japan), Takahiro Adachi (Akita University, Japan)
- OS1-5      **Study on Flow Characteristics of a Control Valve in a Perforated Cage by CFD Analysis**  
16:10-16:30    Yuki Kurosawa, Chongho Youn (Azbil Corporation, Japan)
- OS1-6      **Blowoff Limits of the Smoldering Processes**  
16:30-16:50    Pichayaporn Viriya-amornkij, Kazunori Kuwana (Tokyo University of Science, Japan)
- OS1-7      **Detection of Severe Fire Events by Image Processing**  
16:50-17:10    Nicharee Thinnakornsutibutr, Kazunori Kuwana, Masayuki Mizuno (Tokyo University of Science, Japan)
- OS1-8      **Visualization of Longitudinal Vortex Structure in the Wake of a Flat Plate Airfoil at Low Reynolds Number**  
17:30-17:50    Akihiro Wakabayashi, Keiichiro Hamaguchi (Doshisha University, Japan), Takanori Uchida, Kenichiro Sugitani, Ao Takada (Kyushu University, Japan), Katsuya Hirata (Doshisha University, Japan)
- OS1-9      **Effects on the Aerodynamics of a Spinning Hollow Cylinder in Flight**  
17:50-18:10    Daiki Tanaka, Tomoya Wada, Yusuke Naito (Doshisha University, Japan), Masami Nakano, Jun Ishimoto (Tohoku University, Japan), Hirochika Tanigawa (National Institute of Technology, Maizuru College, Japan), Katsuya Hirata (Doshisha University, Japan)
- OS1-10     **Flow around a Cylinder Moving near the Ground**  
18:10-18:30    Kazuki Matsuno, Ryo Kobayashi, Katsuya Hirata (Doshisha University, Japan)