

OS5: Advanced Applications of Multi-functional Fluids

November 8, 2023

EX-4-B

- OS5-16 **Electrolyte Applications for the Enhancement of Transpiration Driven Electrokinetic Generators**
9:30-9:50 Dylan Edmundson, Anthony Dichiara (University of Washington, USA), Hidemasa Takana (Tohoku University, Japan)
- OS5-2 **Fiber-Morphology-Dependence of Rotational Diffusion Constant of Cellulose Nanofiber Suspension by Brownian Dynamics Simulation**
9:50-10:10 Yukitaka Ishimoto, Rena Koinuma (Akita Prefectural University, Japan), Hidemasa Takana (Tohoku University, Japan)
- OS5-3 **Experimental Investigation on the Flow State of Shear Thickening Fluid in a Circular Channel**
10:10-10:30 Rongchang Zhang, Yusuke Mukuhira, Shingo Ishihara (Tohoku University, Japan), Tongfei Tian (University of the Sunshine Coast, Australia), Yuko Arai, Masaoki Uno (Tohoku University, Japan), Vladimir Sokolovski (University of Wollongong, Australia), Takaaki Tomai, Takatoshi Ito (Tohoku University, Japan)
- OS5-4 **Study on Streaky Structure in the Vicinity of Rotating Inner Cylinder in Co-axial MHD Energy Conversion Device**
10:40-11:00 Takahiro Hasebe, Takayasu Fujino (University of Tsukuba, Japan), Hidemasa Takana (Tohoku University, Japan), Hiromichi Kobayashi (Keio University, Japan)
- OS5-5 **Fundamental Characteristics of Rotating-Detonation-Driven Disk-Shaped MHD Generator Fueled by Hydrogen**
11:00-11:20 Ryu Masuda (Tokyo Institute of Technology, Japan), Masaharu Matsumoto (Fukushima University, Japan), Akira Kawasaki (Shizuoka University, Japan), Yoshihiro Okuno (Tokyo Institute of Technology, Japan)
- OS5-6 **Numerical Simulation of Alkali Metal Seed Mixing Process Based on MHD Generator**
11:20-11:40 Peiqi Zhu, Aiwu Peng (University of Chinese Academy of Sciences / Chinese Academy of Sciences, China)
- OS5-7 Cancelled
- OS5-8 **A Double-Jacketed Enthalpy Probe for Measurement of Supersonic Plasma**
13:20-13:40 Jun-Ho Seo, Dong-Uk Kim, Nam-Gi Lee, Dong-Hyun Lee (Jeonbuk National University, Korea)
- OS5-9 **Evaluation of the Thermal Plasma Pyrolysis of Methane by Using Computational Works**
13:40-14:00 Yong Hee Lee (Jeju National University, Korea), Jeong-Hwan Oh (Electric Energy Center, Korea), Sooseok Choi (Jeju National University, Korea)

- OS5-10 **Application of Cavitation to Plasma Process for Synthesis of Carbon Catalysts for Oxygen Reduction Reaction**
 14:00-14:20 Ryotaro Harakawa, Nozomi Takeuchi (Tokyo Institute of Technology, Japan), Hidemasa Takana (Tohoku University, Japan), Oi Lun Li (Pusan National University, Korea)
- OS5-11 **Carbon Sulfonation by Atmospheric Pressure Plasma**
 14:20-14:40 Nozomi Takeuchi, Siqi Deng (Tokyo Institute of Technology, Japan), Katsuyuki Takahashi (Iwate University, Japan), Kosuke Tachibana (Oita University, Japan), Junko Hieda (Nagoya University, Japan), Oi Lun Li (Pusan National University, Korea)
- OS5-12 **Observation of Ultrasonically Enhanced Electrohydraulic Discharge for Wastewater Treatment**
 14:50-15:10 Tomoyuki Kuroki (Osaka Metropolitan University / Osaka Prefecture University, Japan), Yuya Kumazawa (Osaka Prefecture University, Japan), Haruhiko Yamazaki, Masaaki Okubo (Osaka Metropolitan University / Osaka Prefecture University, Japan)
- OS5-13 **Control Between Two Types of Plasma-induced Liquid Flows**
 15:10-15:30 Toshiyuki Kawasaki, Kecheng Shen (Nishinippon Institute of Technology, Japan)
- OS5-14 **Effect of Plasma Actuation Control on a Field Rotor of HAWT**
 15:30-15:50 Ryosuke Suzuki, Yasunari Kamada, Takao Maeda, Kanta Iwahashi (Mie University, Japan), Motofumi Tanaka, Noritsugu Kubo (National Institute of Advanced Industrial Science and Technology (AIST), Japan), Nobuyoshi Watanabe (ASAHI-Rubber Inc., Japan)
- OS5-15 **The Ac-DBD Plasma Flow Control inside the S-duct at Low Speed**
 15:50-16:10 Fan Jiang, Konstantinos Kontis, Craig White (University of Glasgow, UK)
- OS5-1 **Dynamic Assembly of Strong and Conductive Carbon Nanotube/Nanocellulose Composite Filaments**
 16:30-16:50 Anthony B. Dichiara, Heather G. Wise (University of Washington, USA), Hidemasa Takana (Tohoku University, Japan)
- OS5-17 **Local Electric Field Measurement of Temperature Dependence of Electrical Conductivity and Viscosity**
 16:50-17:10 Tatsunori Kishimoto, Toi Ando, Kentaro Doi (Toyohashi University of Technology, Japan)
- OS5-18 **Chirality-Activated Vortex Flow and Its Reversal Mode in Liquid Crystals**
 17:10-17:30 Shunsuke Takano, Takuya Nakanishi, Kenta Nakagawa, Toru Asahi (Waseda University, Japan)
- OS5-19 **Explosive Growth of Particulate Matters in Smoke Plumes Emitted from Industrial Plants**
 17:30-17:50 Qing Li, Xiang Ding, Di Wu, Jianmin Chen (Fudan University, China)