

OS5: Advanced Applications of Multi-functional Fluids

November 10, 2022

EX-3-A

- OS5-1 **Continuous Fabrication of Strong and Conductive Carbon Nanotube/Cellulose Nanofibril Composite Filaments** *(Invited)*
10:40-11:10 Heather G. Wise, Anthony B. Dichiara (University of Washington, USA), Hidemasa Takana (Tohoku University, Japan)
- OS5-2 **Development of Microscale pH Sensor Using Ionic Current Rectification**
11:10-11:30 Tatsunori Kishimoto, Kentaro Doi (Toyohashi University of Technology, Japan)
- OS5-3 **Preliminary Experimental Study on the Liquid-gas Segmented Flow with A Thermomagnetic Pump**
11:30-11:50 Jun-Yang Ji, Yi-En Tsai, Chih-Yung Huang (National Tsing Hua University, Taiwan)
- OS5-4 **Effect of External Magnetic Field on Dynamic Mechanical Properties of Permanent Magnet Elastomers**
11:50-12:10 Yuhiro Iwamoto, Yohei Kawata, Yasushi Ido (Nagoya Institute of Technology, Japan), Hiroyuki Sakamoto (Nippon Paint Holdings Co., Ltd., Japan)
- OS5-5 **Gasification of Livestock Manure Fuel by Using a Lab-Scale Three Phase AC (Alternative Current) Arc Plasma Torch**
13:30-13:50 Dong-Hyun Lee, Darian Figuera-Michal, Hyo-Jeong Kim, Shi-Young Yang, Jun-Ho Seo (Jeonbuk National University, Korea)
- OS5-6 **Effects of Operating Condition on Methane Pyrolysis Process Using Thermal Plasma**
13:50-14:10 Yong Hee Lee (Jeju National University, Korea), Jeong-Hwan Oh (Electric Energy Research Center, Korea), Sooseok Choi (Jeju National University, Korea)
- OS5-7 **Investigation On Melting Process Of Non-Combustible Wastes By Using A Reverse-Polarity Hollow Electrode Plasma Torch With Power Level Of 100 Kw**
14:10-14:30 Darian Figuera-Michal, Dong-Hyun Lee, Hae-Won Park, Nam-Ki Lee, Jun-Ho Seo (Jeonbuk National University, Korea)
- OS5-8 **Numerical Prediction of Influence of MHD Flow Control on Radiative Heating in Mars Entry**
14:50-15:10 Kotaro Tabuchi, Takayasu Fujino (University of Tsukuba, Japan)
- OS5-9 **Plasma Behavior and Power Generation Characteristics in an Experimental Argon Plasma MHD Generator**
15:10-15:30 Kimsor Ork, Yoshihiro Okuno (Tokyo Institute of Technology, Japan)

- OS5-10 **Numerical Analysis of Supersonic, Nonequilibrium Inductively Coupled Plasma Jet in Plasma-Assisted Aerosol Deposition**
15:30-15:50 Yuki Akedo (University of Tsukuba / National Institute of Advanced Industrial Science and Technology (AIST), Japan), Kenta Ino (University of Tsukuba, Japan), Kentaro Shinoda (National Institute of Advanced Industrial Science and Technology (AIST), Japan), Takayasu Fujino (University of Tsukuba, Japan)
- OS5-11 **Hydrogen Diffusion and Desorption After Sodium-Water Reaction**
15:50-16:10 Ai Suzuki, Masayuki Miyano, Ryuji Miura (Tohoku University, Japan)
- OS5-12 **Attempt to Reduce the Internal Stresses Generated in Steel by a Laser Deposition Process**
16:30-16:50 Aleksander Kulish, Joel Rech, Ferdinando Salvatore, Joel Courbon (Université de Lyon, France)
- OS5-13 **Synthesis of Carbon Catalysts Using Ultrasonic Cavitation Plasma for Oxygen Reduction Reaction**
16:50-17:10 Ryotaro Harakawa, Nozomi Takeuchi, Shungo Zen, Souta Imaizumi (Tokyo Institute of Technology, Japan), Hidemasa Takana (Tohoku University, Japan), Oi Lun Li (Pusan National University, Korea)