

## OS5: Advanced Applications of Multi-functional Fluids

November 8, 2019

EX-1

- OS5-1      **Numerical Simulation of a Cement Kiln Reactor Combined with Arc Plasma Torches for Greenhouse Gases Treatment**  
9:00-9:20      Juyoung Ko, Yong Hee Lee, Tae-Hee Kim, Sooseok Choi (Jeju National University, Korea)
- OS5-2      **Plasma Assisted Milling of Hard-to-machine Metals, Inconel 600 and Manganese Steel.**  
9:20-9:40      Min-Gyu Choi, Sang-Min Chung, In-Mok Yang, Jun-Seok Nam, Shi-Young Yang, Jun-Ho Seo (Chonbuk National University, Korea)
- OS5-3      **Effects of Rotated Arc Jets on Coating Quality in Plasma Spraying Process**  
9:40-10:00      Takayasu Fujino, Hikaru Matsumoto (University of Tsukuba, Japan)
- OS5-4      **Numerical Study of Pre-ionized Inert Gas Plasma MHD Power Generation**  
10:00-10:20      Hajime Suzuki, Yoshihiro Okuno (Tokyo Institute of Technology, Japan)
- OS5-5      **Selective Generation of Metastable Excited Species in Hybrid Plasmas for Plasma Chemistry and Plasma Catalysis Applications (*Invited*)**  
10:40-11:20      Igor V. Adamovich, Elijah Jans, Kraig Frederickson, Ilya Gulko (Ohio State University, USA)
- OS5-6      **Pilot-Scale Investigation of Semi-Dry Plasma-Chemical DeNO<sub>x</sub> Process for Glass Melting Furnace Flue Gas**  
11:20-11:40      Tomoyuki Kuroki (Osaka Prefecture University, Japan), Hashira Yamamoto (Nihon Yamamura Glass Co., Ltd., Japan), Hidekatsu Fujishima, Masaaki Okubo (Osaka Prefecture University, Japan)
- OS5-7      **Cellulose Nanofibrils Decorated with Metallic Nanoparticles for Environmental Monitoring and Remediation (*Invited*)**  
13:10-13:50      Anthony B. Dichiara, Jin Gu, Hai-Lei Cao (University of Washington, USA)
- OS5-8      **Electric Field- Assisted Alignment of Cellulose Nanofibrils and Carbon Nanotubes in a Flow Focusing System**  
13:50-14:10      Heather Wise (University of Washington, USA), Hidemasa Takana (Tohoku University, Japan), Anthony Dichiara (University of Washington, USA)
- OS5-9      **Computational Simulation on Control of Cellulose Nano Fibril by Alternative Electric Field**  
14:10-14:30      Hidemasa Takana, Mengfei Guo (Tohoku University, Japan)
- OS5-10      **Cavitation Flow to Generate Plasma in Highly Conductive Liquid**  
14:50-15:10      Nozomi Takeuchi, Tomohito Koizumi, Shoya Yamazaki (Tokyo Institute of Technology, Japan)

- OS5-11      **Optical Investigations of Primary Breakup in Liquid Sprays**  
15:10-15:30   Noritsune Kawaharada (Leibniz University Hannover, Germany), Hidemasa Takana (Tohoku University, Japan), Friedrich Dinkelacker (Leibniz University Hannover, Germany)
- OS5-12      **Liquid Flow and Particle Transport Control in Nanofluidic Channels**  
15:30-15:50   Kentaro Doi, Satoyuki Kawano (Osaka University, Japan)
- OS5-13      **Thermal Flow of Temperature-Sensitive Magnetic Fluids around a Heating Pipe in the Presence of an Inhomogeneous Magnetic Field**  
15:50-16:10   Yuhiro Iwamoto, Hayaki Nakasumi, Yasushi Ido (Nagoya Institute of Technology, Japan), Xiao-Dong Niu (Shantou University, China)