

OS7: Smart Fluids & Soft Matters and Their Advanced Applications

November 6, 2019

EX-1

- OS7-1 **Electrorheology Lowers The Pour Point Temperature of Crude Oil** (*Invited*)
14:00-14:30 Rongjia Tao, Xiaojun Xu (Temple University, USA)
- OS7-2 **Elastocaloric Effect in Polymers**
14:30-14:50 Gael Sebald (ELyTMaX UMI 3757, CNRS – Université de Lyon – Tohoku University, International Joint Unit, Japan), Gildas Coativy, Kaori Yuse, Jean-Fabien Capsal, Laurent Lebrun (INSA-Lyon, France)
- OS7-3 **Polarization and Elasticity Characterization in Crystal and Amorphous States of Polytetramethylene Oxide Elastomer**
14:50-15:10 Ai Suzuki, Masayuki Miyano, Ryuji Miura (Tohoku University, Japan), Jean-Yves Cavaille, Gildas Diguët, Gael Sebald (ELyTMaX UMI 3757, CNRS – Université de Lyon – Tohoku University, International Joint Unit, Japan)
- OS7-4 **Integration of an Omnidirectional Self-powering Component to an MRE Isolator towards a Smart Passive Isolation System**
15:10-15:30 Jian Yang, Shuaishuai Sun, Masami Nakano (Tohoku University, Japan), Weihua Li (University of Wollongong, Australia)
- OS7-5 **Performance of ECF Micropumps-integrated O/O (oil-in-oil) Droplet Generators** (*Invited*)
15:40-16:10 Joon-wan Kim, Zebing Mao, Kazuhiro Yoshida (Tokyo Institute of Technology, Japan)
- OS7-6 **Behavior of Self-propelled Drops on Hot Surfaces with Asymmetric Wettability in Low Temperature Regime.**
16:10-16:30 Yoshitomo Konno, Kaito Narita, Masaki Kato, Takahiro Okabe, Minori Shirota (Hirosaki University, Japan)
- OS7-7 **Synthesis of Faceted Magnetite Microparticles and Their Magnetorheology**
16:30-16:50 Hiroya Abe (Osaka University, Japan), Kazuyoshi Sato (Gunma University, Japan), Yoshikazu Suzuki (University of Tsukuba, Japan), Takashi Naka (National Institute for Materials Science, Japan), Masami Nakano (Tohoku University, Japan)
- OS7-8 **Development of Dry MR Fluid Brake for Super-compact Electric Vehicle**
16:50-17:10 Masami Nakano, Osamu Taguchi, Fumitake Shibata, Shuaishuai Sun, Jian Yang (Tohoku University, Japan), Hiroya Abe (Osaka University, Japan)
- OS7-9 **Development of an Innovative MR Damper with Negative Stiffness Characteristics toward a New Generation of Vehicle Suspension System** (*Invited*)
17:20-17:50 Weihua Li (University of Wollongong, Australia), Shuaishuai Sun, Jian Yang, Masami Nakano (Tohoku University, Japan)

- OS7-10
17:50-18:10 **Design and Analysis of the Magnetorheological Fluid Variable Differential Transmission**
Matthew Daniel Christie (University of Wollongong, Australia), Shuaishuai Sun, Masami Nakano (Tohoku University, Japan), Weihua Li (University of Wollongong, Australia)
- OS7-11
18:10-18:30 **Experimental and Theoretical Investigation on the Influence of the Volume Fraction of the Particles on MR and Villari Effect**
Gildas Diguët, Gael Sebald (ELyTMaX UMI 35578, CNRS – Université de Lyon – Tohoku University, International Joint Unit, Japan), Masami Nakano (ELyTMaX UMI 35578, CNRS – Université de Lyon – Tohoku University, International Joint Unit / Tohoku University, Japan), Mickael Lallart (INSA-Lyon, France), Jean Yves Cavaille (ELyTMaX UMI 35578, CNRS – Université de Lyon – Tohoku University, International Joint Unit, Japan)
- OS7-12
18:30-18:50 **Development of an Innovative Rubber Joint for Train Using Shear Thickening Fluids**
Shuaishuai Sun, Jian Yang, Masami Nakano (Tohoku University, Japan), Weihua Li (University of Wollongong, Australia)