

OS11: Microfluidics and Microphysiological Modeling

November 9, 2022

EX-3-B

- OS11-1 **Numerical Simulation on the Effects of Internal and External Viscosity Contrast of a Soft Particle on its Motion and Suspension Viscosity**
15:50-16:10 Daiki Nakasue, Tomohiro Fukui (Kyoto Institute of Technology, Japan)
- OS11-2 **Hydrodynamics of Droplet Generation Through Non-Uniform T-Junction Microfluidic System**
16:10-16:30 Akepogu Venkateshwarlu, Ram Prakash Bharti (Indian Institute of Technology Roorkee, India)
- OS11-3 **Competition of Pulsatile Pressure Gradients and AC Electroosmotic Flow in a Microchannel and Resonance Formation**
16:30-16:50 Ilke Kaykanat (Bogazici University, Turkey), Eugenia Corvera Poiré (Universidad Nacional Autónoma de México, Mexico), Kerem Uguz (Bogazici University, Turkey)
- OS11-4 **Flow Promoted by Locomotions in *C. elegans***
16:50-17:10 Yasuhiro Asoshina, Kenji Kikuchi, Takuji Ishikawa (Tohoku University, Japan)
- OS11-5 **Modeling of Internal Driving Force During Sperm Hyperactivation**
17:30-17:50 Sara Kamijo, Toshihiro Omori, Takuji Ishikawa (Tohoku University, Japan)
- OS11-6 **Hydrodynamics of Droplet Generation in a T-Junction Microfluidic System**
17:50-18:10 Pratibha Dogra, Akepogu Venkateshwarlu, Ram Prakash Bharti (Indian Institute of Technology Roorkee, India)
- OS11-7 **Interfacial Instability of Immiscible Fluids Flowing in a Microchannel under an Electric Field**
18:10-18:30 Sercan Altundemir, Yiğit Ağanoğlu, Seymen İlke Kaykanat, Kerem Uğuz (Boğaziçi University, Turkey)
- OS11-8 **Three-Dimensional Culture of Chick Limb Mesenchymal Cells Using Microfluidic Devices**
18:30-18:50 Shohei Yanagita, Koji Tamura, Kenichi Funamoto (Tohoku University, Japan)

November 10, 2022

EX-3-B

- OS11-9 **Liver Circulatory Model to Study the Impact of Hepatectomy on Blood Flow and Pressure** 332113
9:00-9:20 Aimee M. Torres Rojas, Sylvie Lorente (Villanova University, USA), Mathieu Hautefeuille (Universidad Nacional Autónoma de México, México), Aczel Sanchez Cedillo (ISSSTE, México)

- OS11-10 **Flow of a Monolithic Acrylic Microfluidic Pump: Characterization and Immunoassay Trap Compatibility.**
9:20-9:40 Harold O. Ochoa-Gutiérrez, Gabriel A. Caballero-Robledo (CINVESTAV Monterrey, México)
- OS11-11 **Observation of Neutrophil-like HL-60 Cell Motility under Oxygen Gradient**
9:40-10:00 Masashi Tomita, Satomi Hirose, Kenichi Funamoto (Tohoku University, Japan)
- OS11-12 **Influence of Nonlocal Vibration and Elastic Foundation on Bending Dynamics of Nanotubes Conveying Flow**
10:00-10:20 Ulises Torres-Herrera, Antonio Alfonso Torres, Jazive Oshin Casarrubias Flores (Universidad Nacional Autónoma de México, Mexico)
- OS11-13 **Application of Convolutional Neural Network in Micro Particle Velocimetry: Measurements of Two-Dimensional and Three-Dimensional Micro Flow Fields**
10:40-11:00 Po-Yu Chou, Jyh-Jong Sheen (National Taiwan Ocean University, Taiwan)
- OS11-14 **Microfluidic Experiment about Hypoxic Responses of Vascular Endothelial Cells Under Hyperglycemia**
11:00-11:20 Kazuki Sone, Satomi Hirose (Tohoku University, Japan), Daisuke Yoshino (Tokyo University of Agriculture and Technology, Japan), Kenichi Funamoto (Tohoku University, Japan)
- OS11-15 **Numerical Study of Particle Migration in Asymmetric Velocity Profiles.**
11:20-11:40 Ryo Naito, Tomohiro Fukui (Kyoto Institute of Technology, Japan)
- OS11-16 **Electroviscous Effects in the Electrolyte Liquid Flow through Heterogeneously Charged Uniform Slit Microfluidic Device**
11:40-12:00 Jitendra Dhakar, Ram Prakash Bharti (Indian Institute of Technology Roorkee, India)