

OS25: IFS Lyon Center Collaborative Research Forum

November 20, 2024

EX-2

- OS25-1 & OS7-17
9:10-9:50
Numerical Methods for Solving Multimode Giesekus Viscoelastic Fluid Flows
(Invited)
Shihe Xin, Seyedhadi Abdollahzadeh, Ronnie Knikker (INSA Lyon, France), Denis Siginer (Universidad de Santiago de Chile, Chile), Mhamed Botaous (INSA Lyon, France)
- OS25-2
9:50-10:10
Identification of Dominant Modes of Flow Between Rotating Conical Cones by Linear Stability and DMD Analyses
Hiraku Yata, Kana Akinaga (Akita University, Japan), Atsuki Komiya (Tohoku University, Japan), Takahiro Adachi (Akita University, Japan)
- OS25-3
10:10-10:30
Coupled Computing of Fluid-Structure Interaction Problems for Multiphase Energy Systems
Jun Ishimoto (Tohoku University, Japan), Thomas Elguedj (INSA de Lyon, France)
- OS25-4
10:40-11:00
Coarse-grained Lattice Simulations for Turing Patterns on Membranes
Elie Bretin, Camille Carvalho, Roland Denis (Universite Claude Bernard Lyon 1, France), Fumitake Kato, Hiroshi Koibuchi (National Institute of Technology (KOSEN), Ibaraki College, Japan), Simon Masnou (Universite Claude Bernard Lyon 1, France), Madoka Nakayama (Tokyo Medical and Dental University, Japan), Sohei Tasaki (Hokkaido University, Japan), Tetsuya Uchimoto (Tohoku University / ELyTMax, CNRS-Universite de Lyon-Tohoku University, Japan)
- OS25-5
11:00-11:20
Analysis of Frequency Spectrum of Ultrasonic Pulse-Echo Wave Reflected on Periodic Rough Surface
Kotaro Fujii, Hiroyuki Nakamoto (Kobe University, Japan), Philippe Guy (INSA Lyon, France), Tetsuya Uchimoto (Tohoku University / ELyTMax IRL3757, CNRS, Univ. Lyon, INSA Lyon, Centrale Lyon, Université Claude Bernard Lyon 1, Tohoku University, Japan)
- OS25-6
11:20-11:40
Enhancement of Protein Mass Transfer using Ultrasound Induced Flow and Macro-pore Membrane
Atsuki Komiya (Tohoku University / ELyTMax IRL 3757, CNRS, Univ. Lyon, INSA Lyon, Centrale Lyon, Université Claude Bernard Lyon 1, Tohoku University, Japan), Ruiyao Zhu (Tohoku University, Japan), Valéry Botton, Sophie Miralles (INSA Lyon, France)
- OS25-7
11:40-12:00
Active yet Precise Control of Protein Mass Transfer by Membranes
Atsuki Komiya (Tohoku University / ELyTMax IRL 3757, CNRS, Univ. Lyon, INSA Lyon, Centrale Lyon, Université Claude Bernard Lyon 1, Tohoku University, Japan), Juan F. Torres (Australian National University, Australia), Ruiyao Zhu (Tohoku University, Japan), Sébastien Livi (INSA Lyon, France)

- OS25-8
14:50-15:10 **Investigation of Electric Field Induced Bending of Doped Epoxy-amine Elastomers with Ionic Liquids**
Djasma Djoumoi, Laurence Seveyrat, Véronique Perrin, Florent Dalmas, Sébastien Livi, Joël Courbon (INSA Lyon, France), Hidemasa Takana (Tohoku University, Japan / Lyon Center, IFS -Tohoku U., Université de Lyon, France), Jean-Yves Cavaillé (Lyon Center, IFS -Tohoku U., Université de Lyon, France / ELyTMaX IRL3757, CNRS, Univ Lyon, INSA Lyon, Centrale Lyon, Université Claude Bernard Lyon 1, Tohoku University, Japan), Gildas Coativy (INSA Lyon, France)
- OS25-9
15:10-15:30 **Parametric Study of Ion Flow Through Polymer Strip Submitted to a High Voltage**
Joel Courbon (INSA Lyon, France), Hidemasa Takana (Tohoku University, Japan), Gildas Coativy (INSA Lyon, France), Jean-Yves Cavaillé (IFS Lyon Center, France)
- OS25-10
15:30-15:50 **Bending Strength of Density Gradient Designed Silicon Carbide Plate by the Direct Ink Writing**
Hiroki Kurita, Teppei Kudo, Teruyoshi Kanno, Zhenjin Wang, Fumio Narita (Tohoku University, Japan)
- OS25-11
15:50-16:10 **Ultrasound Study of Hydrolytic Ageing of Polymers**
Séverine Boucaud-Gauchet, Jules Caritey, Ghuilem Jusserand, Thibaut Devaux (Université de Tours, France), Sébastien Livi (INSA Lyon, France), François Vander Meulen (Université de Tours, France), Tetsuya Uchimoto (Tohoku University, Japan), Nicolas Mary (INSA Lyon, France)
- OS25-12
16:20-16:40 **Monitoring Eukaryotic Cell Functions under Various Hypoxic Conditions with Microfluidic Based Oxygenators**
Nasser Ghazi (University Claude Bernard Lyon 1, France), Naoto Kawahara, Satomi Hirose, Shohei Yanagita, Kenichi Funamoto (Tohoku University, Japan), Christophe Anjard, Jean-Paul Rieu (University Claude Bernard Lyon 1, France)
- OS25-13
16:40-17:00 **Investigation of a Predictive Therapeutic Response Under Controlled Oxygen Condition in Cancer Patient-Derived Organoids**
Satoshi Aratake (Tohoku University, Japan), Morgane Roinard, Zhouxing Su, Jean-Paul Rieu (University Claude Bernard Lyon 1, France), Kenichi Funamoto (Tohoku University, Japan), Nicolas Aznar (University Claude Bernard Lyon 1, France)
- OS25-14
17:00-17:20 **Super-Resolution Reconstruction of Microdefects on Metal Spherical Surfaces using Eddy Current Pulsed Thermography**
Lihua Guo, Ling He, Zongfei Tong, Shejuan Xie, Zhenmao Chen (Xi'an Jiaotong University, China), Tetsuya Uchimoto, Toshiyuki Takagi (Tohoku University, Japan)
- OS25-15
17:20-17:40 **Analysis of the Drift Velocity Variation of Carbon in Steel under Electric Field**
Ryuta Onozuka (Tohoku University, Japan), Patrice Chantrenne (INSA Lyon, France), Takashi Tokumasu (Tohoku University, Japan)

OS25-16

17:40-18:00

Damage due to Water Jet Impacts on ZnS

Pierre Gantier (INSA Lyon / Safran Electronics & Defense, France), Daniel Nélías, Nicolas Boisson, Thibaut Chaise, Cyril Mauger (INSA Lyon, France), Pascal Dumont, Pascal Junique (Safran Electronics & Defense, France)