

OS23: IFS Lyon Center Collaborative Research Forum

November 7, 2023

EX-2

OS24-2/ **MATEIS: Material Science Lab (*Invited*)**
OS23-1 Nicolas Mary, Eric Maire, Laurent Chazeau, Bernard Normand (INSA Lyon,
15:00-15:15 France)

November 8, 2023

EX-3-B

OS23-2 **Nondestructive Evaluation of Water Uptake in Epoxy-Ionic Liquid Composite
Polymer for Corrosion Protection by Coplanar Capacitor Sensor**
9:40-10:00 Lucas Ollivier-Lamarque, Tetsuya Uchimoto (Tohoku University, Japan), Nicolas
Mary, Sébastien Livi (INSA Lyon, France)

OS23-3 **Effect of Flaw Parameters on Ultrasonic Attenuation**
10:00-10:20 Hiroyuki Nakamoto, Kazuma Terada (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)

OS23-4 **Mass Transfer Enhancement and Control by using Ultrasound Induced Flow**
10:40-11:00 Atsuki Komiya (Tohoku University, Japan), Valéry Botton, Sophie Miralles (INSA
Lyon, France), Ruiyao Zhu (Tohoku University, Japan)

OS23-5 **Numerical Study on Electrical Drift and Diffusion of Ions in Polymer Strips**
11:00-11:20 Joel Courbon (Tohoku University, Japan / INSA Lyon, France), Hidemasa Takana
(Tohoku University, Japan / Lyon Center, IFS-Tohoku University, Université de
Lyon, France), Jean-Yves Cavallé (Lyon Center, IFS-Tohoku University, Université
de Lyon, France / ELyTMaX IRL 3757, CNRS - Université de Lyon – Tohoku
University, International Joint Unit., Japan), Gildas Coativy (INSA Lyon, France),
Gildas Diguët (Tohoku University, Japan)

OS23-6 **Active Control of Protein Mass Transfer by Membranes with Various Pore Patterns**
11:20-11:40 Ruiyao Zhu (Tohoku University, Japan), Juan F. Torres (Australian National
University, Australia), Sébastien Livi (INSA Lyon, France), Atsuki Komiya (Tohoku
University, Japan)

OS23-7 **Study of the Electroactuation of Doped Epoxy-amine Elastomers with Ionic Liquids
under High Electric Fields**
11:40-12:00 Axel Blain, Gildas Coativy, Florent Dalmas, Sébastien Livi, Gabriel Perli,
Véronique Perrin, Laurence Seveyrat (INSA-Lyon, France), Gildas Diguët (Tohoku
University, Japan), Joël Courbon (INSA-Lyon, France), Hidemasa Takana (Tohoku
University, Japan / Lyon Center, IFS-Tohoku University, Université de Lyon,
France), Jean-Yves Cavallé (Lyon Center, IFS-Tohoku University, Université de
Lyon, France / ELyTMaX IRL3757, CNRS, Univ Lyon, INSA Lyon, Centrale Lyon,
Université Claude Bernard Lyon 1, Tohoku University, Japan)

- OS23-8 **Coupled Computing of Fluid-Structure Interaction Problems for Multiphase Energy Systems**
13:10-13:30 Jun Ishimoto (Tohoku University, Japan), Thomas Elguedj (INSA de Lyon, France)
- OS23-9 **Clarification of Flow Structures Related to Jet Noise Generation Using Mode Analysis and High-Precision Jet Flow Simulation**
13:30-13:50 Shota Morita, Aiko Yakeno (Tohoku University, Japan), Christophe Bogey (Université Claude Bernard Lyon I, France), Shigeru Obayashi (Tohoku University, Japan)
- OS23-10 **Nonlinear Bifurcation and Dynamic Mode Decomposition for Taylor Vortex in Gap between Rotating Two Cylinders/Cones**
13:50-14:10 Hiraku Yata, Kana Akinaga (Akita University, Japan), Valery Botton (Lyon University, France), Atsuki Komiya (Tohoku University, Japan), Takahiro Adachi (Akita University, Japan)
- OS23-11 **Which Mechanisms Govern Polymer Deposition By Cold Spray Process?**
14:10-14:30 Chrystelle Bernard (Tohoku University / ELyTMaX UMI 3757, CNRS –Université de Lyon –Tohoku University, International Joint Unit, Tohoku University, Japan), Hidemasa Takana (Tohoku University, Japan / Lyon Center, IFS -Tohoku University, Université de Lyon, France), Olivier Lame (Université de Lyon, France), Kazuhiro Ogawa (ELyTMaX UMI 3757, CNRS –Université de Lyon –Tohoku University, International Joint Unit, Tohoku University / Tohoku University, Japan)
- OS23-12 **Investigation of a Predictive Therapeutic Response Under Controlled Oxygen Condition in Cancer Patient-Derived Organoids**
14:50-15:10 Satoshi Aratake (Tohoku University, Japan), Zhouxing Su, Jean-Paul Rieu (University Claude Bernard Lyon 1, France), Kenichi Funamoto (Tohoku University, Japan), Nicolas Aznar (University Claude Bernard Lyon 1, France)
- OS23-13 **Hypoxia Triggers Collective Aerotactic Spreading of Eukaryotic Cells**
15:10-15:30 Nasser Ghazi, Mete Demircigil (Université de Lyon, France), Satomi Hirose (Tohoku University, Japan), Amandine Chauviat, Vincent Calvez (Université de Lyon, France), Kenichi Funamoto (Tohoku University, Japan), Christophe Anjard, Jean-Paul Rieu (Université de Lyon, France)
- OS23-14 **Finsler Geometry Modeling and Monte Carlo Study on Geometrically Confined skyrmions in Nanodots**
15:30-15:50 Gildas Diguët (Tohoku University, Japan), Benjamin Ducharne (INSA Lyon, France / ElyTMaX, CNRS-Universite de Lyon-Tohoku University, Japan), Sahbi El Hog (Université de Monastir, Tunisie), Fumitake Kato, Hiroshi Koibuchi (National Institute of Technology (KOSEN), Ibaraki College, Japan), Tetsuya Uchimoto (ElyTMaX, CNRS-Universite de Lyon-Tohoku University / Tohoku University, Japan), Hung The Diep (CY Cergy Paris University, France)
- OS23-15 **Atomic Scale Investigation of the Electric Field Dependence of Carbon Diffusion in Fe**
15:50-16:10 Ryuta Onozuka, Takuya Mabuchi (Tohoku University, Japan), Patrice Chantrenne (INSA Lyon, France), Takashi Tokumasu (Tohoku University, Japan)