

## OS20: AFI-2019 IFS Lyon Center Collaborative Research Forum

November 7, 2019

EX-1

- OS20-1      **“Elastomer Materials: From Practical Aspects to Fundamental Questions”** (*Invited*)  
9:00-9:40      Laurent Chazeau (INSA-Lyon, France)
- OS20-2      **Behavior by Design : a New Way of Thinking About Mechanical Properties**  
9:40-10:10      G. Martin, E. Plancher, L. Héraud, P. Lhuissier, R. Dendievel (Université Grenoble Alpes, France), D. Fabrègue (INSA Lyon, France), JJ. Blandin (Université Grenoble Alpes, France)
- OS20-3      **Coarse-grained Modeling and Monte Carlo Study of Strain Induced Crystallization of Rubbers**  
10:10-10:30      Hiroshi Koibuchi (National Institute of Technology, Sendai College, Japan), Vladislav Egorov, Olga Maximowa (Cherepovets State University, Russian Federation), Chrystelle Bernard (ELyTMaX UMI 3757, CNRS-Université de Lyon, Tohoku University, International Joint Unit / Tohoku University, Japan), Jean-Marc Chenal, Olivier Lame (INSA Lyon, France), Gildas Diguët, Gael Sebald (ELyTMaX UMI 3757, CNRS-Université de Lyon, Tohoku University, International Joint Unit, Japan), Jean-Yves Cavaille (INSA Lyon, France), Toshiyuki Takagi (Tohoku University, Japan), Laurent Chazeau (INSA Lyon, France)
- OS20-4      **Investigation of the Thermal Behavior of In-flight Polymer Particle during Cold-Spray Process**  
10:40-11:00      Chrystelle Bernard (Tohoku University / ELyTMaX UMI 3757, CNRS-Université de Lyon, Tohoku University, International Joint Unit, Japan), Hidemasa Takana (Tohoku University, Japan), Gildas Diguët (ELyTMaX UMI 3757, CNRS-Université de Lyon, Tohoku University, International Joint Unit, Japan), Kesavan Ravi (Tohoku University / ELyTMaX UMI 3757, CNRS-Université de Lyon, Tohoku University, International Joint Unit, Japan), Olivier Lame (INSA Lyon, France), Kazuhiro Ogawa (Tohoku University / ELyTMaX UMI 3757, CNRS-Université de Lyon, Tohoku University, International Joint Unit, Japan), Jean-Yves Cavaille (ELyTMaX UMI 3757, CNRS-Université de Lyon, Tohoku University, International Joint Unit, Japan)
- OS20-5      **Electrical Conductivity Versus Electrostriction in Di-block Polyurethane: New Insights**  
11:00-11:20      Kaori Yuse (INSA Lyon, France), Gildas Diguët, Jean-Yves Cavaille (ELyTMaX UMI 3757, CNRS-Université de Lyon, Tohoku University, International Joint Unit, Japan)
- OS20-6      **Protein Mass Transfer Control by Using Hindered Diffusion in Membrane**  
11:20-11:40      Atsuki Komiya, Ryo Watanabe (Tohoku University, Japan), Sébastien Livi (INSA Lyon, France)
- OS20-7      **Elucidation of the Pathophysiology of Skin Sodium and Water Metabolism**  
11:40-12:00      Asadur Rahman, Akira Nishiyama (Kagawa University, Japan), Thomas Elguedj (INSA Lyon, France), Jun Ishimoto (Tohoku University, Japan)

- OS20-8 **Multiscale Design for Composite Aircraft Wings** (*Invited*)  
 15:30-16:00 Yoshiaki Abe (Tohoku University, Japan), Tomonaga Okabe (Tohoku University, Japan / University of Washington, USA), Shugo Date (Tohoku University, Japan)
- OS20-9 **Stability and Transition to Turbulence of Taylor Vortex in a Gap between Rotating Two Cones**  
 16:00-16:20 Takahiro Adachi, Kentaro Usuki (Akita University, Japan), Atsuki Komiya (Tohoku University, Japan), Daniel Henry, Varelly Botton (Lyon University, France)
- OS20-10 **Piping System, Risk Management Based on Wall Thinning Monitoring and Prediction**  
 16:30-16:50 Toshiyuki Takagi (Tohoku University / ELYTMAX UMI 3757, CNRS-Université de Lyon, Tohoku University, International Joint Unit, Japan), Philippe Guy (INSA-Lyon, France), Yutaka Watanabe, Hiroshi Abe, Shinji Ebara (Tohoku University, Japan), Tetsuya Uchimoto (Tohoku University / ELYTMAX UMI 3757, CNRS-Université de Lyon, Tohoku University, International Joint Unit, Japan), Takayuki Aoki, Mitsuo Hashimoto, Ryoichi Urayama, Hongjun Sun (Tohoku University, Japan), Thomas Monnier, Jérôme Antoni, Bernard Normand (INSA-Lyon, France), Nicolas Mary (ELYTMAX UMI 3757, CNRS-Université de Lyon, Tohoku University, International Joint Unit, Japan), Ryo Morita, Shun Watanabe (Central Research Institute of Electric Power Industry, Japan), Atsushi Iwasaki (Gunma University, Japan), Hiroyuki Nakamoto (Kobe University, Japan), Christophe Reboud, Pierre Calmon, Edouard Demaldent, Vahan Baronian, Xavier Artusi, Sylvain Chatillon, Alain Lhemery (CEA-LIST, France)
- OS20-11 **Coupled Computing of Fluid-Structure Interaction Problems for Multiphase Energy Systems**  
 16:50-17:10 Jun Ishimoto (Tohoku University, Japan), Thomas Elguedj (INSA de Lyon, France)
- OS20-12 **Back Surface Roughness Measurement Based on Attenuation of Ultrasonic Wave**  
 17:10-17:30 Hiroyuki Nakamoto (Kobe University, Japan), Philippe Guy (INSA de Lyon, France), Toshiyuki Takagi, Tetsuya Uchimoto (Tohoku University / ELYTMAX UMI 3757, CNRS-Université de Lyon, Tohoku University, International Joint Unit, Japan), Kazuya Hamaguchi (Hyogo Prefectural Institute of Technology, Japan)
- OS20-13 **Monitoring the Damage of the Polymers by Non-destructive Control**  
 17:30-17:50 Lucas Ollivier-Lamarque, Tetsuya Uchimoto (Tohoku University / ELYTMAX, Japan), Nicolas Mary (ELYTMAX, Japan), Sabrina Marcelin, Benoit Ter-Ovanessian, Sébastien Livi (INSA Lyon, France)
- OS20-14 **Modelling Materials Behavior for Advanced Electromagnetic Non Destructive Testing Techniques**  
 17:50-18:10 Bhaawan Gupta (ELYTMAX UMI 3757, CNRS-Université de Lyon, Tohoku University, International Joint Unit, Japan / INSA-Lyon, France / Tohoku University, Japan), Gael Sebald (ELYTMAX UMI 3757, CNRS-Université de Lyon, Tohoku University, International Joint Unit, Japan), Benjamin Ducharme (INSA-Lyon, France), Tetsuya Uchimoto, Toshiyuki Takagi (ELYTMAX UMI 3757, CNRS-Université de Lyon, Tohoku University, International Joint Unit / Tohoku University, Japan)