

OS24: Dynamics of Flow of Matter in Moving Contacts

November 10, 2025

EX-4B

- OS24-1 **Evaluation of Friction between Intravascular Device and Biomodel** (*Invited*)
13:30-14:10 Kazuto Takashima (Kyushu Institute of Technology, Japan), Makoto Ohta (Tohoku University, Japan), Kiyoshi Yoshinaka, Toshikatsu Washio, Kiyoyuki Chinzei (National Institute of Advanced Industrial Science and Technology, Japan)
- OS24-2 **Investigation of Superlubricity Mechanisms of Double Network Hydrogels under Lactic Acid Environments for Biological Surface Applications**
14:10-14:30 Motoyuki Murashima, Jules Tricot, Teita Tada, Koshi Adachi (Tohoku University, Japan)
- OS24-3 **Wear of Solid Lubricants Under Different Tribological Conditions**
14:30-14:50 Vincent Fridrici (Ecole Centrale de Lyon, France)
- 15:00-15:15 BREAK
- OS24-4 **Necessary Conditions for Continuous Super-low Friction in Tribological Systems with Hydrogenated Carbon Coatings under Dry Conditions**
15:15-15:35 Kazuuya Kuriyagawa, Koshi Adachi (Tohoku University, Japan)
- OS24-5 **Anodization for Self-Formation of Low-Friction Interface in a Tribosystem Using Aluminum Alloy in Engine Oil Boundary Lubrication**
15:35-15:55 Théo Yamana, Shota Inoue, Motoyuki Murashima, Koshi Adachi (Tohoku University, Japan)
- OS24-6 **Simulations for Flow of Molecules Through Carbon Nanotubes**
15:55-16:15 Sheng-Feng Huang, Takashi Tokumasu (Tohoku University, Japan)
- OS24-7 **Gallate Spinels For Micro Energy Harvesting Systems**
16:15-16:35 Musa Mutlu Can (Istanbul University, Turkey), Jingjun Liu (Key Laboratory of Electrochemical Process and Technology for Materials, China), Satoru Kaneko (Kanagawa Institute of Industrial Science and Technology (KISTEC) / Institute of Science Tokyo, Japan), Takashi Tokumasu (Tohoku University, Japan)
- 16:45-17:00 BREAK
- OS24-8 **Molecular Insights into the Adsorption Behavior of PFAS on Montmorillonite, Polyethylene, and Polypropylene: A Molecular Dynamics Study**
17:00-17:20 Qiao Wang, Rui Xu, Fusheng Zha, Long Xu, Bo Kang, Heming Han (Hefei University of Technology, China)
- OS24-9 **Friction Control of Tread Rubber under Lubrication by Controlling Fluid Flow at the Contact Interface**
17:20-17:40 Arata Ishizako, Aoi Nishimoto, Toshiaki Nishi, Takeshi Yamaguchi (Tohoku University, Japan)