

東京理科大学 研究推進機構 総合研究院

## 界面科学研究部門 2024 夏季シンポジウム

2024 年 8 月 6 日（火）森戸記念館第 1 フォーラム+Zoom によるオンライン配信

Summer Symposium 2024, Division of Colloid and Interface Science,  
Research Institute for Science and Technology (RIST), Organization for Research  
Advancement, TUS

August 6, 2024, at Morito Memoriam Hall, Forum Room No. 1 + Zoom

### プログラム Program

#### 10:00–10:10 開会挨拶

橋詰 峰雄（工学部工業化学科 教授）

#### 10:10–11:40 招待講演 1

10:10–10:40 小林 文也（理学部第一部化学科 嘱託特別講師）

溶媒蒸気曝露による異方的分子配列変換と協奏的機能開拓

10:40–11:10 関 淳志（理学部第二部化学科 助教）

刺激応答性分子集合体材料の開発

11:10–11:40 新堀 佳紀（総合研究院 嘱託講師）

銀-硫黄クラスターの精密合成と物性評価

#### 11:40–13:00 昼食・休憩（運営委員会（森戸記念館第 3 会議室））

#### 13:00–15:45 Progress Reports from Graduate Students of DCIS（大学院生による英語での研究発表）

13:00–13:10 Chihiro Fujiwara (M1), Kawai Lab.

*Effect of Quaternary Ammonium Salts on Thermal-Responsive Structural Coloring Emulsions*

13:10–13:20 Shiki Funamoto (M1), Kawai Lab.

*Self-Propelled Behavior of Polystyrene Particles Deposited with Two Platinum Spots*

13:20–13:30 Yui Sakai (M1), Hashizume Lab.

*Structural Reinforcement of Polysaccharide Composite Films in Swollen State Using Epoxidized Soybean Oil as a Cross-Linking Agent*

13:30–13:40 Nanami Takahashi (M1), Hashizume Lab.

*Preparation and Evaluation of Hydroxyapatite-Modified Boron-Doped Diamond Substrates*

13:40–13:50 Rina Nomura (M2), Kondo(T) Lab.

*Water Purification Using Boron-Doped Diamond Powder-Packed Electrolysis Flow Cell*

13:50–14:00 Taisei Yamada (M2), Nakayama Lab.

- Interfacial Structures and Electronic States of Single Crystalline Thin Films of a Rubrene Derivative on Rubrene Single Crystals*
- 14:00–14:10 Mayu Okamoto (M1), Nakayama Lab.  
*Development of a Novel Synthetic Method of  $\pi$ -Conjugated Phosphorous-Containing Heterocycles by Transition-Metal-Catalyzed Intermolecular Reaction between Biphenyl Derivatives and Phosphorous Sources*
- 14:10–14:20 Asuka Kasuga (M2), Imura Lab.  
*Preparation and Catalytic Performance of Supported Au-Pt Nanoflowers for Alcohol Oxidation Reactions*

**14:20–14:35 Break**

- 14:35–14:45 Shingo Tsurumoto (M1), Goto Lab.  
*Inhibitory Effect of Copper Ions on Insulin Fibrillation in Liposomal Membrane Environment*
- 14:45–14:55 Sachika Furukawa (M1), Hishida Lab.  
*Effect of Osmolytes on the Activity of  $\alpha$ -Amylase*
- 14:55–15:05 Ayaka Kawano (M1), Hishida Lab.  
*Solvation Structure of Silica Particles in a Binary Mixture of Ionic Liquid and Water*
- 15:05–15:15 Satoru Tamaoki (M2), Sakai&Sakai Lab.  
*Foams of High-Concentration Ethanol Solution Stabilized by pH-Responsive Surfactants*
- 15:15–15:25 Hiromi Yuasa (M2), Sakai&Sakai Lab.  
*Adsorption of Phosphorus Anti-wear Agents in Ester-Based Stocks: Experimental and Simulation Study*
- 15:25–15:35 Aoi Ujigami (M2), Sumino Lab.  
*Control of the Dynamic Patterns in Liquid Crystal Convection by Spatially Modulated Electric Fields*
- 15:35–15:45 Kojiro Otoguro (D3), Sumino Lab.  
*Interfacial Pattern Formation in Fluid Injection System with Precipitation*

**15:45–16:05 休憩**

**16:05–17:15 招待講演 2**

- 16:05–16:40 手老 龍吾 (豊橋技術科学大学 応用化学・生命工学系 教授)  
人工脂質二重膜系を用いた細胞膜反応に関わる要因の探求
- 16:40–17:15 柴田 裕史 (千葉工業大学 工学部 教授)  
ヤヌス粒子を用いた機能性界面の創生

**17:15–17:25 閉会挨拶**

酒井 健一 (創域理工学部先端化学科 教授)

※オンライン参加希望の方、学外から参加希望の方は橋詰 (mhashizu@ci.tus.ac.jp) までご連絡ください。