

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 2022 夏季シンポジウム

Summer Symposium 2022, Division of Colloid and Interface Science (DCIS),
Research Institute for Science and Technology (RIST), Tokyo University of Science (TUS)
August 3, 2022, 10:30-17:30 at Memorial Hall, Building No. 1, Kagurazaka Campus

- 10:30-10:40 **Opening Remark**
Prof. Hideki Sakai (Director of DCIS)
- 10:40-11:20 **Invited Lecture 1** (Chair: Masaaki Akamatsu)
Redox-dependent photophysical and on-surface self-assembling properties of pyrazinacenes
Associate Professor Gary Richards (Shibaura Institute of Technology)
- Progress Reports from Graduate Students of DCIS 1** (Chair: Takeshi Kondo)
- 11:20-11:30 Mechanism of a near-ultraviolet light-emission of melem with high quantum efficiency
Hiroki Kiuchi (K. Kanai)
- 11:30-11:40 Mechanism of charge accumulation of Poly(heptazine imide)
Goichiro Seo (K. Kanai)
- 11:40-11:50 Mechanism of highly-efficient photocatalytic performance of visible-light-driven photocatalyst poly(heptazine imide)
Aika Yamaguchi (K. Kanai)
- 11:50-12:00 Synthesis of tiara-shaped nickel clusters and their activity of oxygen evolution reaction
Tomoshige Okada (Y. Negishi)
- 12:00-12:10 Geometric/electronic structures of silver nanoclusters templated by different anions
Mai Ishimi (Y. Negishi)
- 12:10-13:30 Lunch Break
- 13:30-14:10 **Invited Lecture 2** (Chair: Yutaka Sumino)
Surface and interface measurement using quantum beams
Associate Professor Norifumi Yamada
(High Energy Accelerator Research Organization, KEK)
- 14:15-14:55 **Invited Lecture 3** (Chair: Kenichi Sakai)
Exotic dynamics of molecular self-assemblies in aqueous solution
Associate Professor Taisuke Banno (Keio University)
- 15:00-15:40 **Invited Lecture 4** (Chair: Hideki Sakai)
Fabrication of vesicular structures from mixed cationic/anionic surfactants
Professor Chien-Hsiang Chang (National Cheng Kung University)

Progress Reports from Graduate Students of DCIS 2 (Chair: Kenichi Aoki)

- 15:50-16:00 Effects of local anesthetics on liposomes determined by the inhibitory activity to lipid peroxidation
Yusuke Horizumi (S. Goto)
- 16:00-16:10 Differences in entropy of fusion in indomethacin polymorphs are directly linked to differences in enthalpy of dissolution
Kanji Hasegawa (S. Goto)
- 16:10-16:20 Effect of hydrophobic hydration on the intermolecular interaction of acidic and basic drugs: Diffusion coefficient of Fick's law determined by diffusion ordered spectroscopy (DOSY) and electrochemical impedance spectroscopy (EIS)
Ryotaro Koga (S. Goto)
- 16:20-16:30 The effect of bile salt addition on morphology of phospholipid/cholesterol liposome
Minaru Oda (H. Sakai & K. Sakai)

Progress Reports from Graduate Students of DCIS 3 (Chair: Kenichi Sakai)

- 16:30-16:40 Efficient Electrochemical Production of Formic Acid from CO₂ Using Boron and Nitrogen co-doped Diamond Electrode
Yudai Miyake (T. Kondo)
- 16:40-16:50 Thermal- and mechanical-responsive coloring emulsion
Yu Someya (T. Kawai)
- 16:50-17:00 Functional Integration of Nickel Oxide Catalysis Prepared from Ni (II) Complex
Takanobu Matsui (T. Kawai)
- 17:00-17:10 Adhesions between polyimide films and titanium plates utilizing chitosan
Haruka Nishikawa (M. Hashizume)
- 17:10-17:20 Polymer modification on the surface of carbon-based sheets using π - π interaction and its application to adhesion
Yifan Li (M. Hashizume)
- 17:20-17:30 **Closing Remark**

If you would like to participate this symposium, please contact the following general secretary:

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