



Chemistry Symposium on 25 Anniversary of Dalian University of Technology and Tohoku University 6th Dalian University of Technology–Tohoku University Joint Symposium on Chemistry

Date: May 23rd, 2022, from 13:30 (JST) 12:30 (CST), on line

Conference address: Zoom conference number: 878 9803 3806 Password: 085061

Program

Chair: Prof. Masahiko Yamaguchi (DUT)

13:30–13:40 (JST) Opening remarks Professor Yi Liu (DUT) Professor Masahiro Terada (TU)

Chair: Prof. Yoshinao Nakagawa (TU)

13:40-14:10

Prof. Jianzhang Zhao (DUT)

Energy Transfer and Intersystem Crossing in Transition Metal Complexes Showing Strong Visible Light Absorption and Long-Lived Triplet State

14:10-14:40

Prof. Kazuo Takimiya (TU, Grad. Sch. Science) Synthesis of Molecular Semiconductor Crystals: Towards Rational Design of Crystal Structures for Efficient Carrier Transport

14:40-14:50 Break

Chair: **Prof. Tiexin Zhang** (DUT)

14:50–15:00 **Keita Nakane** (TU, Grad. Sch. Life Science, Supervisor: Prof. Minoru Ishikawa) Development of Proximity Labeling via Histidine Oxidation by Singlet Oxygen

15:00–15:10 **Hongyu Guo** (DUT, Supervisor: Prof. Ming Bao) Palladium-Catalyzed Reductive Dimerization of Terminal Alkynes

15:10–15:20 Naoto Hasegawa (TU, IMRAM, Supervisor: Prof. Hiroshi Kumigashira) Electronic Structure of Ti₂O₃ Thin Films Investigated by Synchrotron Radiation Spectroscopy

Chair: Prof. Shinji Kajimoto (TU)

15:20–15:30 **Yuxuan Zhang** (DUT, Supervisor: Prof. Kun Shao) Noninvasively Sono-Immunotherapy with Methyl ester Chlorin-E6-CA -MPLA Nanoliposomes against Primary Breast Cancer and Metastasis

15:30-15:40

Koki Kannari (TU, Grad. Sch. Science, Supervisor: Prof. Shen Ye) In-situ Surface-Enhanced Raman Scattering (SERS) Observation of Reaction Products on the Cathode Surface of Li-O₂ Battery

15:40–15:50 Lin Ni (DUT, Supervisor: Prof. Chang Yu) Design and Optimization of Carbon-Based Emulsifiers for Pickering Interfacial Catalysis

15:50-16:00 Break

Chair: Prof. Jianzhang Zhao (DUT)

16:00–16:20 **Prof. Guanghui Zhang** (DUT) Structural Evolution of Metal Oxide and Carbide Catalysts during CO₂ Hydrogenation

16:20–16:40

Prof. Yoshinao Nakagawa (TU, Grad. Sch. Technology) Hydrodeoxygenation of Biomass-derived Compounds to Fuels and Useful Chemicals

Chair: Kazuo Takimiya (TU)

16:40–17:00 **Prof. Tiexin Zhang** (DUT) Confined Electron Transfer within MOFs for Synergy of Photocatalysis and Transition-Metal Catalysis

17:00-17:20 **Prof. Shinji Kajimoto** (TU, Grad. Sch. Pharm. Sciences) Label-free Visualization of Intracellular Temperature by Raman Imaging of Water in a Cell

17:20 Closing remarks **Prof. Ming Bao** (DUT) **Prof. Yujiro Hayashi** (TU)

Organizing committee

Masahiko Yamaguchi Masahiro Terada Ming Bao Yujiro Hayashi Sheng Zhang Shigenobu Umemiya