

Catalytic Chemistry for Carbon Neutrality

Sep. 10th, 2023

Room D

Chaired by Keiichi Tomishige (Tohoku Univ.)

Sep. 10th (Sun.)

10:00 – 10:15 Chaired by Mizuho Yabushita (Tohoku University)

10D1 ○Yoshinao Nakagawa (Tohoku University, Japan)
“Regioselective C-O hydrogenolysis of biomass-derived polyols”

10:15 – 10:30 Chaired by Mizuho Yabushita (Tohoku University)

10D2 ○Chao Gai, Zhengang Liu (Chinese Academy of Science / Tohoku University, China)
“Steering biomass waste to value-added biofuels under facile condition by hydrochar-based nanocatalysts”

10:30 – 11:00 Chaired by Mizuho Yabushita (Tohoku University)

10D3 ○Noritatsu Tsubaki (University of Toyama, Japan)
“New Synthesis Reactions by Tailor-Made Catalysts in CO/CO₂ Hydrogenation”

11:00 – 11:30 Chaired by Mizuho Yabushita (Tohoku University)

10D4 ○Yasushi Sekine (Waseda University, Japan)
“Surface protonics promotes low temperature catalysis”

11:30 – 12:00 Chaired by Mizuho Yabushita (Tohoku University)

10D5 ○Hiroshi Kondoh (Keio University, Japan)
“Catalytically Active Surfaces Observed by *In Situ* Surface Spectroscopy”

12:00 – 12:30 Chaired by Yoshinao Nakagawa (Tohoku University)

10D6 ○Kevin C.-W. Wu
(National Taiwan University / National Health Research Institutes, Taiwan)
“Nanoporous Metal-Organic Frameworks (MOFs) Catalysts for Biomass and Plastics Conversion”

14:15 – 14:30 Chaired by Yoshinao Nakagawa (Tohoku University)

10D7 ○Mizuho Yabushita (Tohoku University, Japan)
“CeO₂-Catalyzed Transformation of Amine Carbamates into Value-Added Chemicals”

14:30 – 14:45 Chaired by Yoshinao Nakagawa (Tohoku University)

10D8 ○Ziwei Song, Lijuan Liu, Xu Zhu (Yanshan University / Tohoku University, China)
“Selective Conversion of Cellulose over Na-ZSM-5: Effect of Basic Sites”

14:45 – 15:15 Chaired by Yoshinao Nakagawa (Tohoku University)

- 10D9 ○Masazumi Tamura (Osaka Metropolitan University, Japan)
“Development of Ru-based catalysts for hydrogenolysis of plastic wastes to valuable chemicals”

15:15 – 15:45 Chaired by Yoshinao Nakagawa (Tohoku University)

- 10D10 ○Yutaka Amao (Osaka Metropolitan University, Japan)
“Visible-light driven biodegradable polymer precursor synthesis from gaseous CO₂ using photo/biocatalytic system”

15:45 – 16:15 Chaired by Masazumi Tamura (Osaka Metropolitan University)

- 10D11 ○Akira Nakayama (The University of Tokyo, Japan)
“Microscopic Understanding of Interface at Liquid/Solid-Oxide and Molecular Adsorption on the Surface by Neural Network Potentials”

16:15 – 16:45 Chaired by Masazumi Tamura (Osaka Metropolitan University)

- 10D12 ○Susumu Saito (Nagoya University, Japan)
“Catalytic Hydrogenation of Carboxylic Acids Using Tailored Molecular Catalysts”