

3rd ComBioCat Symposium

“Pathways to Sustainable Chemical Synthesis”

PROGRAM

June 8th, 2022

08:15 a.m. Registration

08:45 a.m. Welcome (Jennifer Strunk)

Session 1 (chair: Jennifer Strunk)

08:55 a.m. Ib Chorkendorff, “Catalysts for Ammonia Synthesis in an Electrified Environment”

09:50 a.m. Bastian Mei, “Electroreduction of Nitrogen Oxides (NO_x) for Ammonia Production: From 2D Electrodes to Hollow Fiber Structures”

10:30 a.m. COFFEE BREAK

Session 2 (chair: Volker Brüser)

10:50 a.m. Ken Ostrikov, “Plasma-Nano-Electrified, Catalytic Processes for Clean Energy, Sustainable Production, and Zero-Carbon Future”

11:45 a.m. Ronny Brandenburg, “Nonthermal Plasmas for CO₂-Splitting”

12:25 p.m. David Kotwica, “Spectroelectrochemical and IR-Photocatalytic Investigations of Manganese-Based CO₂-Reduction-Catalysts”

12:45 p.m. LUNCH BREAK

Session 3 (chair: Udo Kragl)

02:00 p.m. Tom Baker, “Mechanistic Approaches to Ligand-Assisted First Row Metal Catalysis”

02:55 p.m. Duo Wei, “An Amino Acid Based System for CO₂ Capture and Catalytic Utilization to Produce Formates”

03:15 p.m. COFFEE BREAK

03:45 p.m. Poster session

05:30 p.m. END OF 1st DAY

June 9th, 2022

Session 4 (chair: Robert Francke)

09:00 a.m. Franz Faupel, “Vapor Phase Deposition of Nanoparticles and Nanocomposites for Functional Applications”

09:55 a.m. Regina Palkovits, “Catalyst and Reaction Paths Design for the Chemo- and Electrocatalytic Valorization of Biomass”

10:50 a.m. COFFEE BREAK

Session 5 (chair: Jennifer Strunk)

11:10 a.m. Dirk Ziegenbalg, “Contributions of Reaction Engineering Towards Efficient Photochemical Processes”

12:05 p.m. Salih Veziroglu, “Photocatalytic Deposition: Unconventional Approach for Micro- and Nanoarchitecture”

12:45 p.m. LUNCH BREAK

Session 6 (chair: Esteban Mejía)

02:00 p.m. Uwe Schröder, “Green Electrochemistry – Beyond Batteries”

02:55 p.m. Henrik Terholsen, “Recovery of Hydroxytyrosol from Olive Oil Wastewater Using the Promiscuous Hydrolase/Acyltransferase PestE”

03:15 p.m. Shasha Zheng, “A Renewable Route to Highly Valuable Aromatics from Bioderived 5-Hydroxymethylfurfural (HMF) under Mild Conditions”

03:35 p.m. COFFEE BREAK

Session 7 (chair: Michael Lalk)

03:55 p.m. Sandy Schmidt, “Photobiocatalysis: Combining Chemical and Enzymatic Transformations Fueled by Light”

04:35 p.m. Florian Seebeck, “Mechanism and applications of C-S bond making and breaking enzymes”

05:30 p.m. Closing remarks (Jennifer Strunk)

05:40 p.m. END OF 2nd DAY

Organized by Leibniz ScienceCampus ComBioCat

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