

# Agenda of the 2. ComBioCat Symposium "Catalysis Across Borders"

### Monday, Oct. 18, 2021

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

(CEST)

### Session 1 (chair: Jennifer Strunk)

08:55 a.m. Harald Gröger (Univ. Bielefeld): "Chemoenzymatic processes as alternative routes

for the conversion of biorenewables into industrial chemicals"

09:50 a.m. Nor Aishah Saidina Amin (Universiti Teknologi Malaysia): "Mechanistic study of

carbon-doped anatase TiO<sub>2</sub> coated on monolith for enhancing photocatalytic

reduction of carbon dioxide to fuels"

10:45 p.m. COFFEE BREAK

11:00 a.m. Jan-E. Bäckvall (Stockholm Univ.): "Biomimetic Catalysis in Green Organic

Transformations"

11:55 a.m. Annemie Bogaerts (Univ. Antwerp): "Plasma and plasma catalysis for CO<sub>2</sub>, CH<sub>4</sub>

and N<sub>2</sub> conversion: Experiments and modeling"

12:50 p.m. LUNCH BREAK

#### Session 2 (chair: Esteban Mejía)

02:00 p.m. Frank Hollmann (TU Delft): "Peroxygenases as the new P450 monooxygenases.

Scope, current limitations and solutions"

02:55 p.m. Todd Hyster (Cornell Univ.): "Photoenzymatic Catalysis - Using Light to Reveal

New Enzyme Functions"

03:50 p.m. COFFEE BREAK

04:05 p.m. Amanda J. Morris (Virginia Tech): "Insights into light-driven water oxidation by

metal-organic framework arrays"

05:00 p.m. END OF 1st DAY



## Tuesday, Oct. 19th, 2021

## Session 3 (chair: Johannes de Vries)

09:00 a.m. Stephan Hammer (Univ. Bielefeld): "New catalytic reactions by directed enzyme

evolution"

09:55 a.m. Alexander Lammers (Univ. Greifswald): "How to upcyle rice waste? An

antimicrobial story."

10:15 a.m. Shasha Zheng (LIKAT): "Aromatic Compounds from 5-hydroxymethylfurfural (5-

HMF)"

10:35 p.m. COFFEE BREAK

10:50 a.m. Thomas Ward (Univ. Basel): "Artificial Metalloenzymes for in vivo Catalysis:

Challenges and Opportunities"

11:45 a.m. Peter Deuss (Univ. Groningen): "Conversion of lignocellulose components to

value added chemical products"

12:40 p.m. LUNCH BREAK

#### Session 4 (chair: Sebastian Wohlrab)

01:45 p.m. Guido Mul (Univ. Twente): "Photocatalyst synthesis by design: what are future

opportunities?"

02:40 p.m. Bert Weckhuysen (Univ. Utrecht): "Perspectives for the Catalytic Valorization of

Plastic Waste and CO<sub>2</sub>"

03:35 p.m. END OF 2nd DAY

Organized by Leibniz ScienceCampus ComBioCat.

**Participation** is free of charge and possible without registration.

Access via Zoom (please log in with your full name):

Oct. 18th https://uni-rostock-

de.zoom.us/j/66791469240?pwd=V1FyejBQaFp2bGNsV2xBWVdPd05IQT09

Oct. 19th https://uni-rostock-

de.zoom.us/j/62909609836?pwd=aEVpUVFJKzJPOWordmtWa2U2VmUxdz09

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