
12. – 16.07.2021, UnOCat Summer School

Monday, 12.07.2021

13:00 – 16:00 Icebreaker Quiz; Elevator Pitches

Tuesday, 13.07.2021

09:00 – 10:00 Topic 1 (Dr. Soma Salamon)
"Using Mössbauer spectroscopy as a local, element-specific method for catalyst characterization"

10:00 – 10:15 Break

10:15 – 11:15 Topic 2 (Dr. Sven Reichenberger)
"The role of material defects in catalysis"

11:15 – 11:30 Break

11:30 – 12:30 Group work

12:30 – 13:30 Lunch

13:30 – 14:45 Keynote lecture (Prof. Sébastien Royer, Université de Lille)
"Perovskite: Synthesis routes, redox properties and use in oxidation catalysis"

15:15 – 16:45 Keynote lecture (Prof. Alexander Auer, MPI Kofo)
"Computational studies of electrocatalysts - What can electronic structure theory do for reactions like ORR or OER on metals and oxides?"

Wednesday, 14.07.2021

09:00 – 10:00 Topic 3 (Dr. Klaus Friedel Ortega)
"Hazards associated with laboratory catalytic testing"

10:00 – 10:15 Break

10:15 – 11:15 Topic 4 (Dr. Hamid Reza Hajiyani)
"Surface termination and composition control of activity of oxides surfaces: Insights from DFT+U calculations"

11:15 – 11:30 Break

11:30 – 14:15 Group work and Lunch

14:15 – 15:45 Keynote lecture (Prof. Ulrike Kramm, TU Darmstadt)
"Electrocatalyst development - How Mössbauer spectroscopy can contribute to a fundamental understanding of materials and mechanisms"

Thursday, 15.07.2021

09:00 – 12:30 (Gr. 1) Workshop I (Take your presentation to the next level)

13:30 – 17:00 (Gr. 2)

09:00 – 15:30 Workshop II (Publish successfully in peer-reviewed journals)

Afterwards Final group work, if necessary

Friday, 16.07.2021

09:15 – 10:45 Keynote lecture (Prof. Bastian Mei, University of Twente)
"Interfaces in heterogeneous photocatalysis"

10:45 – 11:15 Coffee break

11:15 – 12:45 Keynote lecture (Prof. Karsten Reuter, FHI)
"First-principles based modeling of electrocatalysis: The active site challenge"

12:45 – 13:45 Lunch

13:45 – 15:00 Group presentations