Welcome to the RedoxShield 2024 Workshop!

Spatiotemporal Complexity in Electrochemistry: From Experiments to Models

Where? Raitenhaslach TUM Academy Center, Burghausen, Bavaria, Germany

When? 31st of October to the 1st of November 2024

Technical University of Munich

cnrs

Scientific Committee

Nicolas Plumeré (TUM)

Christophe Léger (CNRS)

Vincent Fourmond (CNRS)

Ben A. Johnson (TUM)

Organizational Committee

Nicolas Plumeré (TUM)

Ben A. Johnson (TUM)

Kelly Lim-Trinh (TUM)

Nadine Ternes (TUM)

Full Program Overview

Hour	Minute	October 31st 2024
10	00	Bus Transport from Munich Airport Terminal 1 to the Venue (TUM Academy & Study Center, Raitenhaslach)
11	30	
12	00	Registration & Lunch (Luggage can be left at the venue until check-in at night)
13	30	
	15	Opening
	30	***Chong Liu***: Spatiotemporal Design of Microscopic Concentration Gradients Enabled by Electrochemistry
14	00	***Katherine Levey***: Unravelling the Spatiotemporal Variability of Redox Species in UV-Vis Spectroelectrochemical Measurements using Numerical Modelling
	30	***Sam Cobb***: Using Enzymes to Understand and Control the Local Environment of Electrocatalysis
15	00	Coffee Break
	30	***Kathryn Toghill:*** Rapid Decoupled Electrocatalytic Reduction of CO_2 using Redox Mediators
16	00	***Karen van den Akker:*** Disentangling Local Reaction Environment Effects with RDE for the Hydrogen Evolution Reaction
	30	***Philip N. Bartlett***: Modelling Enzyme Electrodes - What Do We Learn and How Is It Useful?
17	00	Poster Session
	30	
18	00	Shuttle from venue to Burghausen
	30	Conference Dinner at Hotel Post in Burghausen (Bring your luggage with you and leave it in the bus.)
19	00	
	30	
20	00	
	30	
21	00	
	30	Shuttle from Burghausen to Klostergasthof in Raitenhaslach

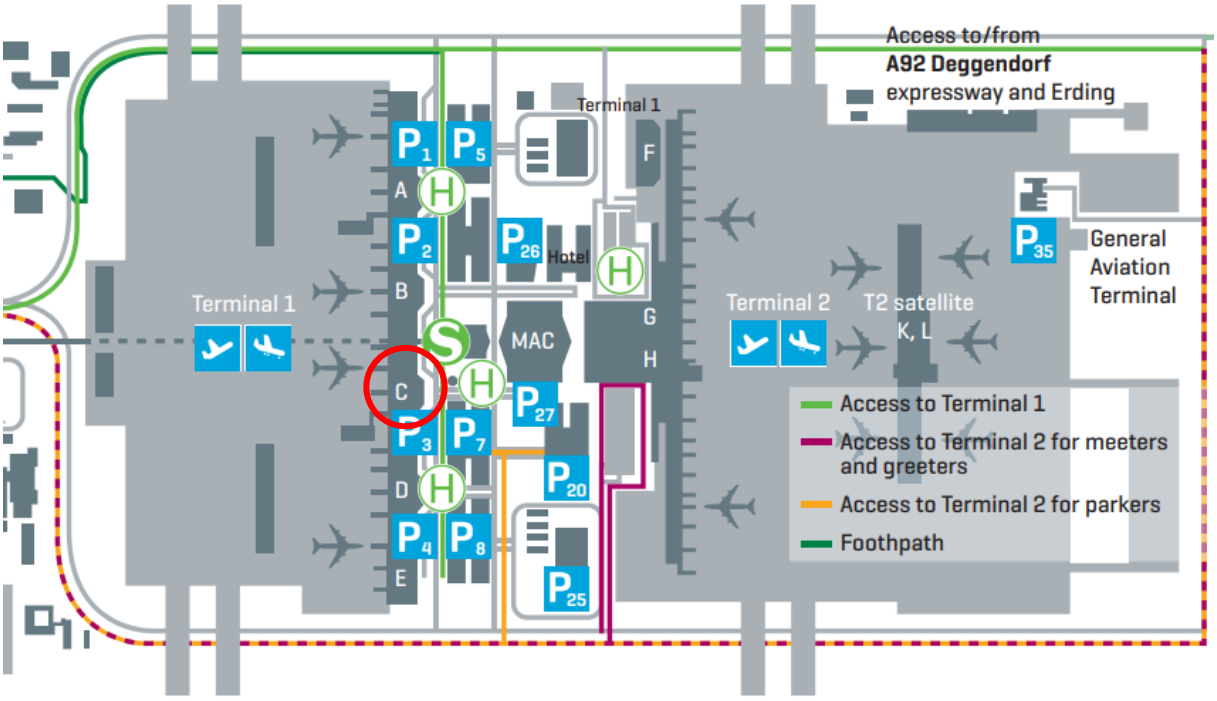
Hour	Minute	November 1st 2024
08	00	Breakfast at Hotel (Starting time depends on hotel)
	30	Shuttle from hotel in Burghausen to venue
09	00	***Alexander Oleinick***: Statistical Characterization of Arrays with Randomly Distributed Active Sites from Their Electrochemical Responses
	30	***Véronique Balland***: Reversible Proton Insertion in TiO_2 from Aqueous Electrolytes: Evidence, Modeling, Consequences
10	00	***Alina Sekretareva***: Surface and Mass Transport at Surface-Confined Single Entities
	30	Coffee Break
11	00	***Alison Parkin***: Tuning In and Out of Dispersion Using Fourier Transform Voltammetry
	30	***Francois Mavré***: Electrochemically Driven Molecular Autocatalytic Reactions
12	00	***Katharina Krischer***: Spatiotemporal Complexity during Si electrooxidation in F-containing electrolytes: Experiments and Modeling
	30	Group Picture (Location TBA)
13	00	Lunch
	30	
14	00	
	30	Closing
15	00	Bus Transport from the venue to Munich Airport Terminal 1
	30	
16	00	
	30	
17	00	

POSTER PRESENTATIONS (31ST OF OCTOBER 2024, ROOM A009 GEWÖLBESAAL)

Electrocatalysis & Heterogenized Molecular Catalysis and Imaging and Modeling Reactions/Boundary Layers	
Santanu Ghorai	Bio-Inspired Catalyst Design Strategy for Anaerobic Ammonia Oxidation
Anna Aldinio Colbachini	Development of an Electrochemical Cell to Arbitrarily Control Concentrations and Its Use to Study H_2-Oxidizing Enzymes
Andrea Fasano	Kinetic Modeling of the Reversible or Irreversible Electrochemical Responses of FeFe-Hydrogenases
Filmon Tedros	Protection of Hydrogenases from O_2 under Intermittent HER via Bidirectional Catalysis
Yan Xie	Bioelectrocatalytic H_2-Driven $NADP^+$ Regeneration for Biotransformation Under Aerobic Conditions
Abhishek Saini	A Seawater Electrolyzer with a Designed Metalloprotein
Naseer Ahmad Shah	Molecular Copper Complex Driving Rapid Electrocatalytic Hydrogen Production from Water
Miriam Malagnini	“SS”: A New, Small, O_2-Stable, Ancestral [FeFe] Hydrogenase

PICK UP POINT FOR THE AIRPORT BUS

The bus will arrive at Munich Airport, **Terminal 1, Sector C**. Bus parking is available just outside. Please look for a bus with the word "**WENGLER**" in red lettering. I will be outside the bus to assist you. The bus will leave at 10 am. See the image below for the exact location.



If you have any questions or need help, feel free to contact me at **Kelly.lim-trinh@tum.de**.
For emergencies only during the conference days, you can reach me at +49 1578 7888 663.

Alternative options:

Option B: Train and Public Transport (approx. 3 hours)

Take the RE22 train (towards Regensburg) to Landshut (Bay) Hbf. From there, take the RB45 (towards Mühldorf) to Mühldorf Oberbay, and then the RB42 (towards Burghausen) to Burghausen. Once you arrive, walk to the “Bahnhof Burghausen” bus station, and take bus 16 (towards Tittmoning/Raitenhaslach) to Raitenhaslach. Alternatively, you can take a taxi from Burghausen (approx. 15-minute ride). The estimated cost is around 35€. However, that depends on the exact route and train you will be taking.

I recommend using the Deutsche Bahn (DB) app to plan your journey. Enter your starting point as "Munich Airport Terminal" and your destination as either "Raitenhaslach" or "Burghausen" (and then take a taxi from Burghausen).

Please note that this route is quite complicated, so try to catch the airport shuttle with us if possible.

Option C: Take an Uber (approx. 1.5 hours)

Use the Uber app to book a ride to the address: Raitenhaslach 11, 84489 Burghausen (TUM Akademiezentrum). The estimated cost is around €190.