

Session Program

22-26 Apr 2024

**Frontiers of Multi-scale Modeling in
Materials, Energy & Catalysis X**

Poster Session

Monday 22 April

20:00

Poster Session

Session | Location: Hotel Marena Wellness & Spa Turystyczna 1, 72-415 Międzywodzie, Poland

20:00-22:00

On the pH-Dependent Shift of the „Hupd Peak“ on Polycrystalline Pt-Group Surfaces

Speaker

Ms Hedda Oschinski

20:00-22:00

Bridging the Gap: From EIS to Real-World Battery Performance with Stochastic Pulse Design

Speaker

Ms Limei Jin

20:00-22:00

With Markov Jumps Toward Sustainability - Computational Modeling of Catalytic Reactions

Speaker

Dr Martin Deimel

20:00-22:00

Machine Learning Assisted Realistic Description of Catalytic Centers on M1 Catalyst Surfaces

Speaker

Mr Kyeonghyeon Nam

20:00-22:00

Exploring Dynamic Solvation Effects at the Electrochemical IrO₂/Water Interface

Speaker

Mr Nikhil Bapat

20:00-22:00

Excitation Trapping and Polaron Formation in Solar Battery Materials

Speaker

Ms Nόra Kovács

20:00-22:00

Modelling LLZO Grain Boundaries with Amorphous Domains by Adaptively Trained Machine-Learning Interatomic Potentials

Speaker

Ms Yuandong Wang

20:00-22:00

Incorporation of Preparation Variability Into Reactor Models of Heterogeneous Catalysts

Speaker

Mr Muhammad Zeeshan Ashraf

20:00-22:00

Combining DFTB and Structure Mapping for the Prediction of Transition Paths in the Deactivation of ZnO@Cu Catalysts**Speaker**

Dr Artem Samtsevych

20:00-22:00

How the Metal Substrate Affects Oxide Cluster Shapes in Inverse Catalysts**Speaker**

Mr Luuk Kempen

20:00-22:00

Realistic Representations of IrO₂ Catalyst Surfaces through Extensive Sampling**Speaker**

Dr Hao Wan

20:00-22:00

Adaptive Quasi Monte Carlo Quadrature With Possible Application in Bayesian Inference of Chemical Kinetic Models**Speaker**

Jinyi Zhou

20:00-22:00

Machine Learning Enhanced Bayesian Inference on Multiscale Kinetic Models**Speaker**

Mr Andreas Panagiotopoulos

20:00-22:00

Predicting Atomic Charges in MOFs by Topological Charge Equilibration**Speaker**

Mr Babak Farhadi J ahromi

20:00-22:00

Adapting Explainable Machine Learning to Study Mechanical Properties of 2D Hybrid Perovskites**Speaker**

Mr Yuxuan Yao

20:00-22:00

A Fundamentals Study of the Slater-Koster Tables in NiO_x Systems**Speaker**

Mr Yihua Song

20:00-22:00

Exploring Enhanced Sampling Concepts Using Boltzmann Generators**Speaker**

Mr David Greten

20:00-22:00

Classical Force Field Simulations of Electrolytes at Charged Water Surfaces**Speaker**

Dr Jakob Filser

22:00	20:00-22:00	Charge Mobility Estimation in Amorphous Organic Semiconductors via Machine Learning
	Speaker	Dr Ke Chen
	20:00-22:00	A General-Purpose Framework for Kinetic Monte-Carlo Simulations
	Speaker	Dr Roya Ebrahimi Viand
	20:00-22:00	Exploration of Cathode-Stable Hybrid Solid-State Electrolytes
	Speaker	Ms Sina Jennifer Ziegler
	20:00-22:00	Li-Ion-Mediated Polaron Formation and UV Energy Storage in NbWO₆ Photo-Batteries: An Integrated Experimental and Computational Approach
	Speaker	Dr Yu-Te Chan
	20:00-22:00	Considerations of Mean Field Microkinetic Modeling: Selective Hydrogenation of C₂H₂
	Speaker	Dr Olga Vinogradova

Tuesday 23 April

16:00

Poster Session

18:00

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