

Department of Dynamics at
Surfaces Retreat and
Workshop on Modern Topics in
Chemical Physics

7 - 10 April 2025

Theodor-Schwartz-Haus,
Travemünde



Monday, April 7	
15:00	Room Check in
16:00-16:15	Alec Wodtke: Welcoming Remarks
16:15-16:45	Malte Opfermann: The Effect of Doping in Inelastic H Atom Scattering from Silicon
16:45-17:15	Anna-Maria Schöнемann: H Atom Scattering Meets Ultrafast Laser Heating: Obstacles, Results and Simulations
17:15-17:45	Sophia Tödter: Effect of the Substrate on Hydrogen Atom Scattering from Graphene
18:00-19:30	Dinner
20:00-20:30	Kai Golibrzuch: Overcoming Limitations of Quasi-Continuous Ion Imaging Experiments: Solutions Instead of Work-Arounds
20:30-	Informal Discussions
Tuesday, April 8	
08:00-09:00	Breakfast
Session Chair:	
09:00-10:00	Bin Jiang: Full-dimensional First-principles Nonadiabatic Dynamics of Energy Transfer in Gas-Surface Scattering
10:00-10:30	Oliver Bünermann: Towards inelastic H atom scattering from cold metal surfaces
10:30-11:00	Coffee Break
11:00-11:30	Igor Rahinov: Vibrational energy transfer upon the collision of NO with VO ₂ thin films across the insulator-to-metal transition
11:30-12:00	Alexander Kandratsenka: Towards Nonadiabatic Dynamics Simulations of Carbon Atom Scattering from Metal Surfaces
12:00-12:30	Kerim Benfreha: Molecular Beam Surface Scattering of O ₂ on Au(111)
12:30-14:00	Lunch Break
Session Chair:	
14:00-15:00	Günther Rupprechter: Chemical dynamics in single particle catalysis: observing reactions by correlative in situ microscopy
15:00-15:30	Florian Nitz: Hydrogen Oxidation on Platinum Surfaces – A Case of Non-Langmuir-Hinshelwood Chemistry?
15:30-16:00	Stefan Hörandl: Rate determining processes for ammonia conversion and product formation during oxidation on Pt surfaces
16:00-16:30	Coffee Break
16:30-17:30	Edvin Lundgren: Probing surface dynamics at the solid-liquid interface
17:30-18:00	Jan Fingerhut: Unravelling the interfacial electrolyte structure in the electrochemical double layer with THz spectroscopy and X-ray scattering experiments
18:00-19:30	Dinner
20:00-	Poster Session I

Wednesday, April 9	
08:00-9:00	Breakfast
Session Chair:	
09:00-10:00	Christian Reece: Taming Complexity in Heterogeneous Catalysis
10:00-10:30	Alice Bremer: Decomposition of NO ₂ on Palladium: Investigation of the Kinetics of Oxygen and Nitrogen Atom Recombination
10:30-11:00	Coffee Break
11:00-11:30	Mark Bernard: Advancements in Measuring the Thermal Rates of Gas-Surface Reactions
11:30-12:00	Tim Schäfer: Styrene Epoxidation on Oxidized Silver
12:00-12:30	Rasika Dissanayake: Roaming reactions of chiral aldehydes
12:30-14:00	Lunch Break
Session Chair:	
14:00-15:00	Free time
15:00-16:30	Boat trip to Pötenitzer Wiek: Boarding from Überseebrücke-2, Travepromenade
18:00-19:30	Dinner
19:30-20:30	Dimitry Borodin: Low-Temperature Scanning Probe Techniques for Studying Spins on Surfaces
20:30-	Informal Discussions
Thursday, April 10	
08:00-09:00	Breakfast (check out of room by 10:00)
Session Chair:	
09:00-09:30	How to group seminar in Göttingen: concept discussion
09:30-10:00	Daniel Crowley: Investigation of Initial Phase of Vibrational Energy Pooling of CO ₂ adsorbed on NaCl(100)
10:00-10:30	Michael Schwarzer: Towards a Low Temperature FTIR-Spectrometer with SNSPD detector
10:30-11:00	Coffee Break
11:00-11:30	Sayan Kangsa Banik: Electron Transfer Coupled Spin Transitions in Di- and Tetranuclear Fe/Co Prussian Blue Analogues Revealed by Ultrafast Spectroscopy
11:30-12:00	Arved Dorst: CO oxidation on Rh(111)/Rh(332)
12:30-14:00	Lunch Break
14:00	Departure/ Free time