

Surface Science Discussions 2024 – Programme

		09.01.2024 - SESSION 1		Seminar Chairman: Mikołaj Lewandowski
10:00-10:05 (CET)	05:00 PM in CN, 06:00 PM in JP and KR 04:00 AM in FL, USA, 08:00 PM in NSW, AUS	Welcome word from the Organizers		
10:05-10:50		OPENING LECTURE Prof. Dr. Klaus Kern	Atomic Scale Imaging: From Biomolecular Function to Quantum Dynamics	
		The catalyst under reaction conditions		
10:50-11:15		Prof. Dr. Günther Rupprechter	In situ Surface Microscopy of Nanostructures and Reactants During Catalysis	
11:15-11:40		Prof. Dr. Qiang Fu	Interface Catalysis Over Oxide/Metal and Oxide/Oxide Catalysts	
11:40-12:05		Dr. Su-Hyun Yoo	Tailoring Electrocatalyst Performance Through Engineering Dopants and Understanding Dopant Evolution After Hydrogen Oxidation Reaction	
12:05-12:20		Coffee break		
		09.01.2024 - SESSION 2		
		Hydroxylation and oxidation of surfaces		
12:20-12:45		Prof. Dr. Angelika Kühnle	Water at Mineral Surfaces: Hydration of K-Feldspar Microcline (001)	
12:45-13:10		Prof. Dr. Franciszek Krok	The Effect of Reduction and Oxidation Processes on Structural and Electronic Properties of TiO ₂ (110)	
13:10-13:35		Prof. Dr. Edvin Lundgren	Surface Sensitive Studies of the Electrolyte/Electrode Interface	
13:35-14:00		Dr. Baran Eren	Operando X-ray Spectroscopy Study on the Oxidation State of Nickel during the Oxygen Evolution Reaction	
14:00-15:00		Lunch break		
		09.01.2024 - SESSION 3		
15:00-15:15		nanoscore gmbh (Unisoku EU-representative)	Unisoku Scanning Probe Microscopy Products	
		Novel approaches in theoretical studies of catalytic reactions		
15:15-15:40		Dr. Alessandro Fortunelli	ML-Accelerated DFT Sampling of Dynamical Processes in Catalysis & Materials Science	
15:40-16:05		Dr. Lucas Foppa	Learning Design Rules for Heterogeneous Catalysts via Artificial Intelligence	
16:05-16:30	11:30 PM in CN, 12:30 AM in JP and KR 10:30 AM in FL, USA, 02:30 AM in NSW, AUS	Dr. Duy Le	Ab initio Simulation of Surface Reaction in Electrochemical Environment with Hybrid Solvent Model	
		10.01.2024 - SESSION 1		
	04:30 PM in CN, 05:30 PM in JP and KR	Molecules from different perspectives: Laser-induced processes and magnetic molecular systems		
09:30-09:55 (CET)	03:30 AM in FL, USA, 07:30 PM in NSW, AUS	Prof. Dr. Jennifer MacLeod	Design and Characterisation of One-Dimensional Molecular Materials	
09:55-10:20		Prof. Dr. Karina Morgenstern	Single-Molecule Investigation of Laser-Driven Chemistry at Surfaces	
10:20-10:45		Dr. Hiroshi Imada	Single Molecule Laser Nanospectroscopy	
10:45-11:10		Prof. Dr. Richard Berndt	Spin Effects in Adsorbed Molecules and Clusters	
11:10-11:35		Dr. Martina Corso	Transition Metals Dihalides: From 2D Magnetism to Metal-Organic Hybrids	
11:35-11:50		Coffee break		
		10.01.2024 - SESSION 2		
		Controlled modification of surfaces		
11:50-12:15		Prof. Dr. Sarp Kaya	Arrangement and Clustering Patterns of Platinum Atoms on the Stepped Copper (211) Surfaces	
12:15-12:40		Dr. André Luis Fernandes Cauduro	Cooperative Mechanisms Behind Nanoscale Smoothing on Metal Surfaces: From Adatom Diffusion to Step Nucleation	
12:40-13:05		Dr. Maciej Rogala	Exploring Defect Migration Mechanisms in the Context of Resistive Switching at TiO ₂ Surfaces	
13:05-14:05		Lunch break		
		10.01.2024 - SESSION 3		
14:05-14:20		Materials Design	MedeA Computational Software for Atomistic Simulation of Materials	
		Growth, structure and properties of molecular layers and 2D materials		
14:20-14:45		Prof. Dr. Grażyna Antczak	Identification of Chiral CoPc+F16CuPc on Ag(100) Domains in Reciprocal Space with the Molecular Structure Factor	
14:45-15:10		Prof. Dr. M. Alexander Schneider	Growing Te Containing TMDCs on Metal Substrates in UHV	
15:10-15:35		Prof. Dr. Fabian D. Naterrer	Lessons Learned from Applying Sparse Sampling and Parallel Spectroscopy for Fast Quasiparticle Interference Imaging	
15:35-16:20		CLOSING LECTURE Prof. Dr. Cristiana di Valentin	Architecturing Graphene Interfaces with Metal Surfaces or Molecular Layers For Tailor-Made Nanotechnology	
16:20-16:25	11:25 PM in CN, 00:25 AM in JP and KR 10:25 AM in FL, USA, 02:25 AM in NSW, AUS	Concluding remarks by the Organizers		