FRITZ-HABER-INSTITUT
MAX-PLANCK-GESELLSCHAFT

Symposium on Reactions and Dynamics at Interfaces

— Bridging Theory and Experiment at the Multiscale Level —

02-03.December.2026, FHI Library, Fritz-Haber Institute of the Max-Planck Society, Berlin

02.December.2026

Time	Talk (Q&A) min	Talk type	Speaker	Affiliation	Title	Chair
9:15					*Welcome (coffee + α)*	
9:30	5 (0)	Opening	Akitoshi Shiotari		Opening remark	Morikawa
9:35	40 (5)	Keynote talk	Martin Wolf	PC, FHI	Ultrafast dynamics and metastability of quantum materials at the atomic scale	
10:20					*Coffee break + **Group photo***	
10:35	10 (0)	Overview talk	Yoshitada Morikawa	U. Osaka	Machine learning-accelerated multi-scale simulations for heterogeneous catalysis	Koitaya
10:45	25 (5)	Regular talk	Nicolas Hörmann	TH, FHI	From constant-potential DFT to reactive interface dynamics under applied bias	
11:25	25 (5)	Regular talk	Harry H. Halim	U. Osaka & TH, FHI	Interfacial water dynamics and infrared spectra with machine-learned potentials	
					Lab tours for visitors	
15:00	25 (5)	Regular talk	Christopher Kley	ISC, FHI	*TBD*	Hörmann
15:30	25 (5)	Regular talk	Takanori Koitaya	Kyoto Univ.	In-situ/operando spectroscopy of chemical reactions at gas-solid and liquid-solid interfaces	
16:00	10 (3)	Flash talk	Hiroki Yasumura	Kyoto Univ.	Surface orientation dependent vibrational spectra of formate on copper	
16:15					*Coffee break*	
16:30	25 (5)	Regular talk	Yuki Tsujikawa	Keio Univ.	Study on the role of co-existing H_2O in CO_2 activation over Cu surfaces	Hamada
17:00	10 (0)	Overview talk	Akitoshi Shiotari	PC, FHI	The plasmonic "gaps": quantum vs. classical and pico vs. macro worlds	
17:10	10 (3)	Flash talk	Naoki Hashimoto	PC, FHI & Chiba U.	Localized plasmon-induced dissociation in a two-dimensional metal-organic framework	

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9:00					*Welcome (coffee + α)*	
9:15	10 (0)	Overview talk	Jun Yoshinobu	ISSP, U. Tokyo	Surface chemistry at steps and edges of model catalysts	Halim
9:25	10 (3)	Flash talk	Yoshiko Sakaguchi	ISSP, U. Tokyo	Methanol adsorption and dehydrogenation mechanisms on Cu-based model catalyst surfaces under ultrahigh vacuum and near ambient pressure conditions	
9:40	25 (5)	Regular talk	Kenta Kuroishi	ISSP, U. Tokyo	Ultrafast spectroscopy in the mid-infrared region: development and applications	
10:10	25 (5)	Regular talk	Martin Thämer	PC, FHI	The depth-dependent molecular water structure at interfaces studied by nonlinear vibrational spectrocopy	
10:40	10 (3)	Flash talk	Debojyoti Roy	PC, FHI	Molecular orientations of surface hydroxyls and interfacial water structure at the air/MgO interface	
10:55					*Coffee break*	
11:10	15 (0)	Overview talk	Ikutaro Hamada	U. Osaka	Bridging multiple gaps: Theory development and experiment-theory collaboration in surface science	Shiotari
11:25	10 (3)	Flash talk	Fakhrian H. T. Baskoro	U. Osaka	Calculating formic acid decomposition rates on Cu using transition interface sampling	
11:40	25 (5)	Regular talk	Sebastian Matera	TH, FHI	From electrons to the reactor: A multiscale view on heterogenous catalysis	
12:10	5 (0)	Closing	Yoshitada Morikawa		Closing remark	
					Lab tours for visitors	