

# The 1<sup>st</sup> Sino-German Young Scientist Symposium on Structures & Dynamics at Surfaces

Fri., Nov. 6			
8:30—8:45	Opening Remarks		
8:45—9:35	<b>Zhou Lu</b>	Martin Wolf (G)	Ultrafast Dynamics of Photo-induced Surface Reactions
9:35—10:00		Sheng Meng (C)	Quantum electron-ion dynamics at interface from TDDFT
10:00-10:25		Oriol Vendrell (G)	Ultrafast energy transfer from THz pulses to bulk water and to clusters: towards a new activation strategy for time-resolved reaction dynamics?
10:25—11:00	Photo & Coffee Break		
11:00—11:25	<b>Yuki Nagata</b>	Wei Liu (C)	Weak bond is not weak: The crucial role of van der Waals forces in hybrid inorganic-organic systems
11:25—11:50		Jean Christophe Tremblay (G)	Chemical processes at nanostructured surfaces: a theoretical perspective
11:50—12:15		Xinzhen Li (C)	Quantum simulation of hydrogen and lithium phase diagrams
12:15—14:20	Lunch		
14:20—14:45	<b>Shuji Ye</b>	Liu Weitao (C)	Electrochemical interfaces studied by sum-frequency vibrational spectroscopy
14:45—15:10		Luis Velarde (3)	Unraveling interfacial vibrionic and intermolecular interactions via doubly-resonant sum frequency spectroscopy
15:10—15:35		Zefeng Ren (C)	Probe Adsorption Structures of Methanol on TiO <sub>2</sub> (110) Under Both UHV and High Pressure Conditions
15:35—16:05	Coffee Break		
16:05—16:30	<b>Gerson Mette</b>	Wei Gan (C)	Electric charge and molecular adsorption at oil/water interfaces
16:30—16:55		Junling Lu (C)	Atomic Layer Deposition—Sequential Self-limiting Surface Reactions for Advanced Catalyst “bottom-up” Synthesis
16:55—17:20		Li Chen (G)	Vibrational energy pooling in multilayer CO on NaCl(100) studied with nanosecond time resolution using a superconducting nanowire single photon detector
Dinner			

<b>Sat., Nov. 7</b>			
8:30—9:20	<b>Martin Wolf</b>	Zhi Liu (C)	Probing Solid-Liquid Interface Using APXPS
9:20—9:45		Zhou Lu (C)	Nanoparticle-Biomolecule Interactions in Aqueous Solutions Probed by Sum Frequency Generation Vibrational Spectroscopy
9:45-10:10		Shuji Ye (C)	Molecular Structures and Dynamics of Proteins at the Interface
10:10—10:40	Coffee Break		
10:40—11:05	<b>Ying Jiang</b>	Harald Kirsch (G)	Probing interfacial water structure on $\alpha$ -Al <sub>2</sub> O <sub>3</sub> (0001)
11:05—11:30		Igor Rahinov (3)	Who by fire: combustion synthesis of nanomaterials and complex surfaces – mechanism, diagnostics and applications
11:30—11:55		Li Song (C)	Engineering and characterizing hybridized nanostructures
11:55—12:20		Pranav Shirhatti (G)	HCl Dissociation on Au(111)
12:20—14:20	Lunch		
14:20—14:45	<b>Luis Velarde</b>	Chuanshan Tian (C)	Unveiling Microscopic Structures of Charged Water Interfaces
14:45—15:10		Ellen Backus (G)	Ultrafast energy transfer in interfacial water molecules underneath a surfactant layer
15:10—15:35		Yi Gao (C)	Structure Evolution of Metal Nanoparticles in Water Environment
15:35—16:05	Coffee Break		
16:05—16:30	<b>Chuanshan Tian</b>	Nagata Yuki (G)	The mechanism of the water evaporation
16:30—16:55		Zhen Zhang (C)	Structure and dynamics of hydrogen bonding and proton transfer at aqueous solution interface
<b>Banquet</b>			

<b>Sun., Nov. 8</b>			
8:30—8:55	<b>Zhi Liu</b>	Sascha Schäfer, (G)	Ultrafast Low-energy Electron Diffraction
8:55—9:20		Chuanyao Zhou (C)	Localized Excitation of Ti <sup>3+</sup> Ions in the Photoabsorption and Photocatalytic Activity of Reduced TiO <sub>2</sub>
9:20—9:45		Sean T. Roberts (3)	Using Singlet Exciton Fission to Harvest Solar Energy
9:45—10:10		Katrin Siefermann (G)	Ultrafast electron dynamics at interfaces
10:10—10:40	Coffee Break		
10:40—11:05	<b>Ellen Backus</b>	Xiao Lin (C)	Atomically Precise Nitrogen-doped and Sulfur-doped Graphene Nanoribbons on Au(111)
11:05—11:30		Quan Shuai (G)	Experimental results of hydrogen recombination on metal surface
11:30—11:55		Xiaojun Wu (C)	Theoretical Investigation of Chemical Reaction on Metal/h-BN Monolayer
11:55—12:20		Zhenyu Li(C)	Graphene Growth on Metal Surfaces: From Mechanism Understanding to Protocol Design
12:20—14:20	Lunch		
14:20—14:45	<b>Pranav R. Shirhatti</b>	Ying Jiang (C)	How quantum is the hydrogen bond?
14:45—15:10		Gerson Mette (G)	Controlled metalation of pyrphyrin molecules on Au(111): Preparation of a water reduction catalyst on a solid substrate
15:10—15:35		JianFeng Li (C)	Shell-isolated plasmonic nanoparticle-enhanced Raman spectroscopy
15:35—16:05	Coffee Break		
16:05—16:30	<b>Zefeng Ren</b>	Jun Jiang (C)	A theoretical study of photo-induced electron kinetics in composite functional materials
16:30—16:55		Tim Schäfer (G)	Surface Scattering with Controlled Molecular Beams
Dinner			