



NORTHWESTERN
UNIVERSITY



**Joint Meeting of UniCat and Northwestern University, Evanston, USA
March 18-19, 2013**

**Freie Universität Berlin, Institute of Chemistry and Biochemistry
Takustraße 3, 14195 Berlin-Dahlem, Lecture Hall (ground floor)**

Monday, March 18th

08:30	<i>Registration</i>	
09:00	<i>Matthias Driess</i>	Welcome
09:10	<i>Mike Bedzyk</i>	An X-ray atomic-scale view of oxide supported catalysts
09:50	<i>Joachim Sauer</i>	Storage and activation of hydrocarbons - ab initio approach
10:30	<i>Peter Stair</i>	The scope and flexibility of atomic layer deposition for catalyst synthesis
11:10	Coffee break	
11:40	<i>Harold Kung</i>	Modifying Catalytic Properties with Interfaces and Local Structures
12:20	<i>Hajo Freund</i>	Model Catalysts for Oxidation Reactions: Are Dopants in Simple Oxides relevant?
13:00	Lunch	
14:30	<i>Martin Oestreich</i>	Biologically Inspired Si-H Bond Activation for Catalysis
15:10	<i>Justin Notestein</i>	Controlling the nanospace around oxide catalysts: additives, hybrid surfaces, and nanocavities
15:50	Coffee	
16:20	<i>Reinhard Schomäcker</i>	Kinetic modelling and reaction engineering of the oxidative coupling of methane
17:00	<i>Tobin Marks</i>	New Catalytic Approaches to Cleaving Challenging Bonds: C-O and C-H
17:40	<i>Christian Limberg</i>	Biomimetic and Bioinspired Complexes for the Functional Modeling of Nickel-based Oxidoreductases
18:20	End	

Tuesday, March 19th

09:00	<i>Rick Van Duyne</i>	Surface-enhanced Raman spectroscopy (SERS) and Tip-Enhanced Raman Spectroscopy (TERS) for Catalysis
09:40	<i>Peter Hildebrandt</i>	Vibrational spectroscopies for studying (bio)catalytic processes
10:20	<i>Franz M. Geiger</i>	Supported Palladium Nanoparticle Catalysts under Cyclohexane/Hexanol/Hexanoic Acid Solutions Studied by Vibrational Sum Frequency Generation
11:00	<i>Michael Wasielewski</i>	Artificial Photosynthesis: Integrating Light Capture with Catalysis
11:40	Coffee break	
12:20	<i>Holger Dau</i>	Water oxidation: From biology to amorphous electrocatalysts
13:00	<i>Amy Rosenzweig</i>	Biological methane oxidation
13:40	Lunch	
15:10	<i>Holger Dobbek</i>	On the role of Fe, Co and Ni in the bacterial life on CO and CO ₂
15:50	<i>Oliver Lenz</i>	Biocatalytic activation of H ₂
16:30	Coffee break	
17:00	<i>Concluding Discussion</i>	
18:00	End	