

Workshop on Catalysis and Surface Science
Hotel MarMonte, Santa Barbara CA, 13-15 December 2006

Wednesday, December 13		
7:30 am	<i>breakfast buffet</i>	
Morning sessions: Chair, Horia Metiu		
8:00 am	Mike Bowers UCSB	Size Selected Cationic Gold and Silver Clusters (n = 3 to 13) in the Gas Phase: Structures and Ligand Binding Energies. Approach to the Bulk.
8:55 am	Steve Buratto UCSB	Mass Selected Ag and Au Clusters on TiO ₂
9:50 am	<i>break</i>	
10:05 am	Masatake Haruta Tokyo Metropolitan University	Active Sites in Catalysis by Gold
11 am	J. M. (Mike) White Pacific Northwest National Laboratory and UT Austin	Surface Chemistry on Rutile TiO ₂ (110)
<i>lunch (Vista Room)</i>		
Afternoon sessions: Chair, Gianfranco Pacchioni		
2:00 pm	Jose Rodriguez Brookhaven National Laboratory	Water-Gas Shift Reaction on Cu and Au Nanoparticles Dispersed on Oxides: Intrinsic Activity and Importance of Support Interactions
2:55 pm	Johannes A. Lercher Technical University of Munich	Elementary Steps in Acid Catalyzed Alkane Conversions
3:50 pm	<i>break</i>	
4:05 pm	Enrique Iglesia UC Berkeley	Catalytic Activation of Methane on Small Metal Clusters: Structural Requirements and Reaction Pathways
5:00-5:30 pm	general discussion	
Thursday, December 14		
7:30 am	<i>breakfast buffet</i>	
Morning sessions: Chair, Steve Buratto		
8:00 am	Horia Metiu UCSB	Doped Oxides: A Possible New Class of Oxidation Catalyst
8:55 am	M. S. Hegde Indian Institute of Science, Bangalore	Noble Metal (M) Ions and Oxide Ion Vacancies as Active Sites in Ce _{1-x} M _x O _{2-δ} , Ti _{1-x} M _x O _{2-δ} and Ce _{1-x-y} Ti _x M _y O _{2-δ} : New Generation Redox Catalysts
9:50 am	<i>break</i>	
10:05 am	Hajo Freund Chemical Physics Department, Fritz Haber Institute, Berlin	Model Systems for Heterogeneous Catalysts based on Thin Oxide Films
11 am	Gianfranco Pacchioni University of Milan	Theory of Oxide Surfaces: From Supported Metals to Photocatalysis
<i>lunch (Vista Room)</i>		
Afternoon sessions: Chair, Charlie Campbell		
2:00 pm	Hans Niemantsverdriet Eindhoven University of Technology	Kinetics of Elementary Surface Reactions and the Role of Lateral Interactions between Adsorbates
2:55 pm	Matthias Scheffler	Key Theoretical and Algorithmic Needs for Predictive Modeling of Surface

	Theory Department, Fritz Haber Institute, Berlin, and UCSB	Chemistry and Catalysis
3:50 pm	<i>break</i>	
4:05 pm	Lanny D. Schmidt University of Minnesota	Catalysis Issues for Renewable Fuels and Chemicals
5:00-5:30 pm	general discussion	
Friday, December 15		
7:30 am	<i>breakfast buffet</i>	
Morning sessions: Chair, Bruce Gates		
8:00 am	Charlie Campbell University of Washington	Thermodynamics of Surface Oxides and Metals Adsorbed on Oxides
8:55 am	Jingguang Chen University of Delaware	Predicting Electronic and Chemical Properties of Monolayer Bimetallic Surfaces
9:50 am	<i>break</i>	
10:05 am	Gerard Meijer Molecular Physics Department, Fritz Haber Institute, Berlin	Infrared Spectroscopic Characterization of Clusters and Cluster Complexes
11 am	Eric McFarland UCSB	Multifunctional Catalytic Systems: Applications to Methane Activation and Photocatalysis
<i>lunch (Vista Room)</i>		
Afternoon sessions: Chair, Hajo Freund		
2:00 pm	Bruce Gates UC Davis	Molecular Catalysis on Porous Oxide and Zeolite Surfaces
2:55 pm	Susannah Scott UCSB	Reversible Precious Metal Incorporation in Perovskite Catalysts
3:50 pm	<i>break</i>	
4:05 pm	Robert Schlögl Inorganic Chemistry Department, Fritz Haber Institute, Berlin	How Copper Develops from a Bulk Metal into an Active Catalyst for C1 Chemistry