



International Max Planck Research School

# Complex Surfaces in Material Science

## Introductory Block Course on “Reactivity and Catalysis”

September 29 - October 02, 2008

Hörsaal A,  
Fachbereich Physik der FU Berlin  
Arnimallee 14, 14195 Berlin

The lectures will be presented by speakers from the Humboldt-Universität zu Berlin, the Technische Universität Berlin, the Freie Universität Berlin and the Fritz-Haber-Institut der MPG in Berlin.

**Open to all students, Ph.D. students, postdoctoral scientists and guests.  
You are welcome to attend - no registration required!**

<b>Monday</b> 29.09.08	9:00 – 10:30	H.-J. Freund: Experimental techniques to measure reactions on single crystal surfaces	11:00 – 12:30	K Christmann: Kinetics of surface reactions I
	14:00 – 15:30	A. Trunschke: Reaction mechanisms in selective oxidation	16:00 – 17:30	M. Wolf: Photoinduced Surface Reactions and Dynamics I
<b>Tuesday</b> 30.09.08	9:00 – 10:30	K Christmann: Kinetics of surface reactions II	11:00 – 12:30	M. Wolf: Photoinduced Surface Reactions and Dynamics II
	14:00 – 15:30	R. Schomäcker: How to get to the active site: Mass transport in catalysis	16:00 – 17:30	H.-J. Freund: Using microkinetics to deduce reaction mechanism
<b>Wednesday</b> 01.10.08	9:00 – 10:30	R. Schlögl: Dynamics of high performance catalysts	11:00 – 12:30	A. Felicke: Reactivity of gas phase clusters I
	14:00 – 15:30	H.-J. Freund Examples (Pd on Fe <sub>3</sub> O <sub>4</sub> : Hydrogenation of butane)	16:00 – 17:30	R. Schlögl Mechanisms of hydrogenation reactions
<b>Thursday</b> 02.10.08	9:00 – 10:30	J. Sauer Hydrocarbon reactivity: Active sites on oxide surfaces vs. gas phase species	11:00 – 12:30	R. Schomäcker: reactor design – a primer
	14:00 – 15:30	A. Felicke: Reactivity of gas phase clusters II	16:00 – 17:30	H.-J. Freund Examples



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