



TECHNISCHE
UNIVERSITÄT
WIEN

Vienna University of Technology

INSTITUT FÜR
ANGEWANDTE PHYSIK
Institute of Applied Physics
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IAP-SEMINAR

EINLADUNG

Termin: **Dienstag, 16.10.2012 um 16:00 Uhr**
Ort: **Technische Universität Wien,
Institut für Angewandte Physik,
Seminarraum 134A, Turm B (gelbe Leitfarbe), 5. OG
1040 Wien, Wiedner Hauptstraße 8-10**

Vortragende: **Ph Dr. Swetlana Schauer**
Fritz-Haber-Institut der Max-Planck-Gesellschaft, Berlin/D

Thema: **Interaction of Gas Phase Molecules with Nanostructured Model
Supported Catalysts: Thermodynamics and Kinetics**

Kurzfassung

Our research activities are focused on atomistic-level understanding of kinetics and thermodynamics of heterogeneously catalyzed reactions and adsorption processes on model supported catalysts. By employing pulsed multi-molecular beam techniques, IRAS and synchrotron-based spectroscopies, we investigate the mechanistic details and kinetics of complex multi-pathway surface reactions, such as hydrocarbon transformation in presence of hydrogen or selective hydrogenation of multi-unsaturated hydrocarbons, to obtain the correlations between the reactivity and the particular structure of the catalytic surface and its chemical state under the reactions conditions. Complementary, we investigated the particles size effects on adsorption energies with single crystal adsorption calorimetry.

*Alle interessierten Kolleginnen und Kollegen sind zu diesem Seminar
(45 min mit anschließender gemeinsamer Diskussion) herzlich eingeladen.*

*U. Diebold e.h.
(Seminar-Chairperson)*

*H. Störi e.h.
(LVA-Leiter)*