



TECHNISCHE
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ANGEWANDTE PHYSIK
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IAP-SEMINAR

EINLADUNG

- Termin: **Dienstag, 20.5.2014 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**
- Vortragender: **Prof. Dr. Hans-Peter Steinrück**
Lehrstuhl für Physikalische Chemie II, Universität Erlangen-Nürnberg/D
- Thema: **A look at the physics and chemistry of complex surfaces**

Kurzfassung

Surface reactions can be followed in detail using X-ray photoelectron spectroscopy (XPS or ESCA). From the binding energies of the adsorbate and substrate core levels, detailed information on the chemical composition, chemical state (e.g. oxidation state), adsorption sites, but also on the photoemission process itself can be derived. Different examples will be addressed in this presentation. The first example deals with the **oxidation of sulphur** on stepped platinum surfaces. The second example deals with the characterization and modification of the **surface properties of ionic liquids** (ILs). Due to their low vapor pressure, the full arsenal of UHV-based surface science methods can be applied to investigate this material class and detailed information can be derived. Particular emphasis will be given on the composition of the IL/vacuum interface, the properties of ultrathin IL layers on metal substrates, i.e., the IL/metal interface, and on in situ reaction studies in ILs. The third example addresses the adsorption of **porphyrins on metal surfaces**. In particular, we focus on the synthesis of metalloporphyrin monolayers by direct metalation of free base porphyrins.

*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)*