

VORTRAG IM RAHMEN DES SONDERFORSCHUNGSBEREICHS 623  
DER UNIVERSITÄT HEIDELBERG  
MOLEKULARE KATALYSATOREN: STRUKTUR UND FUNKTIONSDESIGN

Freitag, 19. September 2003, 11.00 Uhr

Hörsaal West, Im Neuenheimer Feld 252

**Prof. Dr. Tobin J. Marks**

Department of Chemistry, Northwestern University,  
USA

**"Bridges between heterogeneous and homogeneous catalysis. The case of single-site and multiple-site olefin polymerization catalysts"**

Abstract:

Chemisorption of many types of organometallic molecules upon metal oxide and halide surfaces can lead to dramatic enhancements in their reactivity. High activities for polymerization and hydrogenation are two illustrative consequences of this altered reactivity. This lecture focuses on chemical and spectroscopic studies using designed organometallic molecules to probe the nature of the molecule-surface coordination chemistry and to understand the reasons for enhanced reactivity. This information in turn leads to design rules for the synthesis of spectroscopically /crystallographically / catalytically characterizable ion-paired "single-site" homogeneous organometallic models for the surface species. Such studies not only afford an improved understanding of the surface organometallic chemistry and catalysis, but also aid the development of new classes of "single-site" and "multiple-site" homogeneous olefin polymerization catalysts.

Gäste sind herzlich willkommen.

Bei Interesse an einem Gesprächstermin bitte melden im:  
Büro des SFB 623 Tel.: 06221-54-8427 Fax: 06221-54-8398

DER SPRECHER  
gez. P. Hofmann