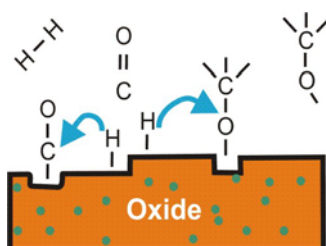


Fakultät für Chemie und Biochemie

SFB 558 – Metall-Substrat-Wechselwirkungen in der heterogenen Katalyse



EINLADUNG ZUM VORTRAG VON

Dr. Jianli Zhao

Institute of Physical Chemistry, Heidelberg University

(Gast von Dr. Wang)

“Bottom-Up Fabrication of Nanostructures from Building Blocks of Au and Co Nanoparticles on Ultra-Thin Organic Films”

The deposition of nanoparticles onto surfaces is a hot topic for the bottom-up formation of nanostructures. With the abilities to assemble nanoparticles into patterns and arrays, it paves the way for the construction of nanodevices and molecular electronics. Self-assembled monolayers (SAMs) of organic molecules are widely used for the immobilization and patterning of metallic nanoparticles through the interaction between the surface of nanoparticles and the terminal groups from SAMs. By controlling the distribution of functional groups on SAMs with electron-irradiation-promoted exchange reaction, it is attractive to generate well-defined patterns of Au and Co nanoparticles on the micro/nanometer scale by selective immobilization of particles on the functionalized areas. The structure change of the SAMs during this process is crucial for the fabrication of nanodevices with respect to the structure-dependent electronic properties of the films. In this talk I would like to share some interesting results regarding the above aspects and discuss some ideas with you for the future work.

Sondertermin:

Freitag, 25.02.2011 | 11.15 Uhr | NC 5/99

Gäste sind herzlich willkommen!