

# EINLADUNG

zum Vortrag  
von

**Dr. Zhenrong Zhang**

Department of Physics, Baylor University

**Catalytic Reactions on TiO<sub>2</sub>: A Direct View at Atomic Scale**

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Technische Universität Wien  
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gegenüber der Mensa (rechts neben dem gelben Lift)  
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## **Abstract:**

The catalytic activity of reducible oxides is often dominated by surface defects. Our studies have focused on how such reactive sites affect the chemical activity of the oxide, specifically TiO<sub>2</sub>, using scanning tunneling microscopy (STM). Acetone and formaldehyde are involved in many surface catalytic and photo-catalytic reactions on metal oxides. The unique methodology enables us to achieve the atomic-level understanding of the key elemental steps — adsorption, dissociation, diffusion, and coupling reaction — taking place in heterogeneous catalytic reactions.

**FWF SFB F45 „Functional Oxide Surfaces and Interfaces (FOXSI)“**

Prof. Günther Rupprechter (Speaker), Melanie Schärer (SFB FOXSI Secretary)

Vienna University of Technology, Institute of Materials Chemistry, 1060 Vienna, Getreidemarkt 9, Austria

Tel.: +43-(0)1 58801-165102 - Fax: +43-(0)1 58801-16599

e-mail: [grupp@imc.tuwien.ac.at](mailto:grupp@imc.tuwien.ac.at), e-mail: [melanie.schaerer@tuwien.ac.at](mailto:melanie.schaerer@tuwien.ac.at)

web: <http://foxsi.tuwien.ac.at/>