

## Andreas Stierle

*Deutsches Elektronen-Synchrotron DESY, Hamburg/Germany*

**Friday, 18<sup>th</sup> October 2024, 15:00 s.t.**

TU Wien, Institut für Angewandte Physik, E134  
1040 Wien, Wiedner Hauptstraße 8-10  
Green Tower „A“, 3<sup>rd</sup> floor, SEM.R. DA grün 03 B



## Synchrotron Light for Catalysis and Corrosion Research

Synchrotron light has become an important tool in materials, nanomaterials, and surface analysis. For in-operando insights in processes such as heterogeneous catalysis, electrocatalysis, or corrosion often unique experiments are possible. In this talk I will present examples from present research.

Andreas Stierle is professor for nanoscience at the University of Hamburg and leading scientist at DESY. He is also responsible for the organisation of the DESY nanolab as a user facility. His main focus is on the investigation of the structure and physical-chemical properties of nanoscale systems ranging from ultra-high vacuum to application-related environmental conditions, with the help of synchrotron radiation based methods. In addition to this, complementary laboratory examination methods of the DESY nanolab are used. The results gained deepen the fundamental understanding of gas, solid state or liquid-solid interfaces of nano materials which are used for anti-corrosion or in energy conversion processes.

All interested colleagues are welcome to this seminar lecture (45 min. presentation followed by discussion).

Markus Valtiner  
(LVA-Leiter and Seminar Chair)