

The catalytic activity of metal oxide step sites

In this project we will create model systems with a large fraction of catalytic active metal oxide step sites and characterize their atomic scale structure mainly with Scanning Tunneling Microscopy (STM) and high resolution X-ray Photoelectron Spectroscopy (HRXPS). Subsequently, we plan to measure the catalytic activity of the model systems and correlate measured catalytic activity with the atomic scale structure of the step sites. The first model system we started to study is a ultrathin FeO(111) film grown on a stepped Pt(111) crystal.

Currently, three PhD students at the Division of Synchrotron Radiation Research are involved in this project. As an Exjobb student you will work in close collaboration with these PhD students and you will get a unique chance to be a part of a real research project.

Further information:

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