Friedrich-Alexander-Universität
Naturwissenschaftliche Fakultät

2024/10/15

1 PhD Student Position:
New Concepts in Catalysis – In situ Spectroscopy and Microscopy

Applications are invited for a PhD student position at the Erlangen Center for Interface Research and Catalysis, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Group of Prof. Jörg Libuda.

Research topic will cover **surface science studies on model catalysts using in situ spectroscopy and microscopy**.

The research project aims at acquiring molecular level understanding of catalytic processes using innovative materials concepts. The **range of experimental methods will comprise state-of-the-art spectroscopy (vibrational spectroscopy) and microscopy (scanning tunnelling microscopy, atomic force microscopy) in ultra-high vacuum at liquid/solid interfaces and gas/solid interfaces**. The project is embedded into interdisciplinary and international cooperations involving partner groups from natural science and engineering (https://www.sfb1452.research.fau.eu/).

The Friedrich-Alexander-Universität (FAU) Erlangen-Nürnberg (www.fau.eu) is among the top-ranked Universities in chemistry research in Germany. In particular, FAU is ranked 1st in the field of Chemical Solid State and Surface Research (DFG Funding Atlas). We offer leading-edge projects, state-of-the-art equipment and excellent working conditions. The Erlangen Center for Interface Research and Catalysis (www.ecrc.fau.eu) covers state-of-the-art research on catalysis and interfaces in all its facets from basic research to process development. At the Chair of Interface Research and Catalysis (Libuda Group, www.ecrc.fau.eu/libuda-group) we **focus on the fundamental understanding of chemical processes at complex interfaces**. The group explores complex model interfaces, covering surface science, electrocatalysis, photochemistry, in situ and operandi studies. Specifically we aim at the mechanistic understanding of chemical processes associated with energy conversion, energy storage, sustainable chemical production and innovative materials synthesis.

We expect flexibility and commitment, but also communication skills and the capability to work in a team. For application as a PhD student, a diploma or master degree in chemistry, physics, chemical engineering, or materials science is required. Specific experience in the research field is not mandatory.

The university promotes gender equality and aims at increasing the fraction of women in science. Handicapped persons are preferred if equally qualified. Please send your CV / list of publication / references / summary of research activities to:

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