Virtual DPG-Frühjahrstagung (DPG Spring Meeting) of the Surface Science Division 1 – 4 March 2021



Mini Symposium **Electrified Solid-Liquid Interfaces**

Shifting the energy supply towards renewables necessitates the development of energy storage systems, in particular based on catalytic and electrochemical transformations of materials at solid-liquid interfaces. While being one of the oldest fields in modern science, the study of electrochemical interfaces is still a challenging task, both in terms of performing insightful and accurate experiments, as well as in their theoretical description.

In 2 sessions à 2h, we bring together leading experimental and theoretical scientists that have made significant contributions to the field, in particular also to stimulate discussions concerning the relation between classical and more recent views of such systems. The **first session** aims at providing a comprehensive review of the fundamental understanding of electrochemical interfaces and electro-catalytic reactions. The **second session** will focus on recent theoretical developments, highlighting new methods to include the electrode potential in all-explicit ab-initio simulations and to derive accurate barriers for electrochemical reactions enabling a more detailed understanding of electrocatalytic processes.

Invited Speakers:

Prof. Beatriz Roldán Cuenya (Fritz-Haber-Institut, Berlin)

Prof. Karen Chan (Technical University of Denmark)

Prof. Jörg Neugebauer (MPI für Eisenforschung, Düsseldorf)

Prof. Wolfgang Schmickler (Ulm University)

We **welcome submissions for contributions** highlighting recent developments and challenges.

To provide ample time for exchange **about the possibilities**, **requirements**, **and challenges** electrified solid-liquid interfaces impose on theoretical descriptions and on performing insightful and accurate experiments, the symposium will take advantage of the new possibilities of online meetings and include a **general discussion**.

Nicolas Hörmann (TU Munich) and Mira Todorova (MPI für Eisenforschung)