Research Profile

Anja Bieberle-Hütter focuses in her research on experiments and modeling of materials for the energy transition. Her aim is to identify the limitations at electrochemical interfaces to provide important information to design improved catalysts and structures. From the experimental side, her research interests are on thin film deposition and microstructuring of metal and metal oxide thin films, as well as their chemical, structural, spectroscopic and (photo-)electrochemical characterization. In modeling and simulation, Anja Bieberle-Hütter focuses mainly on microkinetic modeling, including bridging to other length scales and by this doing real multi-scale modeling. Outstanding is her focus on combining the experimental investigations with the multi-scale modeling to measure and simulate the same data, identify critical reaction intermediates and rate-determining reaction steps, verify models, and predict experimental data.

Academic Background

Anja Bieberle-Hütter studied Materials Science & Engineering at the University Erlangen-Nürnberg, Germany, and Alfred University, USA, and holds a PhD from ETH Zurich, Switzerland. After several years in industry and at Massachusetts Institute of Technology (MIT), USA, she worked as a senior scientist, Oberassistent, lecturer, and project manager at ETH. Since 2014, Dr. Bieberle is leading the group “Electrochemical Materials and Interfaces” at DIFFER (Dutch Institute for Fundamental Energy Research). She acted as the head of the Solar Fuels department from 2020 to 2023. Dr. Bieberle is a renowned international expert, was awarded many prices and research grants (e.g. Research infrastructure – national consortia (PLD4Energy); M2-ENW (BOOST)), and is represented in numerous (inter)national commissions and boards (e.g. EU joint program AMPEA, COST Action 18234, NWO theme Materials, Dutch Chemistry Council).