



Within the etzoldlab (Prof. Etzold, Technische Chemie 1, TU Darmstadt) there are several and postdoc PhD positions with relation to technical electrochemistry open. These can be filled with chemists or chemical engineers with a good foundation in electrochemistry.

General background information on the etzoldlab

In the etzoldlab the challenges arising with the needed global energy change and future sustainable feedstock supply for chemical industry are the major research guideline. From the perspective of applied chemistry, a multidisciplinary approach is employed to provide scientific solutions for these challenges, especially for the complex interplay of catalytic materials within a full process or device. In the scientific approach spanning with the experiments from controlling process conditions from highly idealized towards technically realistic play a dominant role. Chemical reaction engineering simulations as well as diagnostics complement the experiments, giving especially insights into complex mass transfer phenomena and, therefore making a more holistic picture possible. As a future sustainable energy and chemical industry will need a concerted interaction of electrochemical and classical heterogeneous catalyzed processes both are studied.

Information of projects with open PhD positions

Hessian cluster project „Clean Circles“

Electrochemical reduction of iron oxide within ionic liquids and deep eutectic solvents as new technology for energy storage and green steel making

Project within the platform H2Giga des BMBF

Deposition of active Ni-species on complex structured metal meshes and electrochemical characterization within alkaline water splitting

Information of projects with open Postdoc positions

Project within the platform H2Giga des BMBF

Implementation of a lab scale alkaline electrolyser operating at technical relevant conditions. Determination of activity and mass transfer properties of novel catalyst coated substrates in a zero-gap design.

Application

If you are interested, please send your application to Prof. Etzold (bastian.etzold@tu-darmstadt.de).