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Master or PhD thesis

Thesis title

Understanding transport in electrolytes via X-ray photon correlation spectroscopy

Thesis description

This project aims at gaining predictive knowledge of how ions move from one electrode to the other through the electrolyte in electrochemical systems. Here, the driving forces are migration, diffusion, and convection. Via advanced X-ray photon correlation spectroscopy, our goal is to measure electrolytes' dynamics *operando* at various length scales which are correlated to microscopic and macroscopic transport phenomena.

The project may involve travel to international user facilities such as DESY (Hamburg), SSRL (Stanford), APS (Chicago), and ESRF (Grenoble).

For more information please contact Prof. Dr. Hans-Georg Steinrück.

