Electrochemical Investigation of Particle-Based Catalysts for Energy Conversion

Electrochemical conversion technologies, like water electrolysis or fuel cells, require the use of highly active catalyst materials. To improve the available active sites, high-surface area materials, like (supported) metal-nanoparticles, are often utilized. These are transformed into electrodes by depositing thin-films onto suitable supports.

This talk will deal with the possibilities as well as hurdles that are observed during the formation and electrochemical characterization of such thin-films in model electrodes as well as the challenge of transfer from lab-based analysis into the real device.