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FAKULTÄT FÜR CHEMIE

Einladung zum Vortrag von

Prof. Ryan Richards, PhD

Department of Chemistry and Materials Science Program, Colorado School of Mines, Joint Appointment at National Renewable Energy Laboratory, Golden, USA Nanostructured materials with unique catalytic properties

The preparation of nanoscale materials is one of the most exciting areas of modern science and is at the forefront of the quest for a sustainable future. The field of nanotechnology has generated a great deal of interest primarily because on this size scale numerous new and potentially useful properties have been observed. These size dependent properties include melting point, specific heat, surface reactivities, catalytic, magnetic, and optical properties. In particular, the Richards' group is working on new synthetic methods to control the size, shape and composition of nanoscale materials and applying them in systems integral to alternative energy technologies, pharmaceuticals, biomass upgrading, batteries, petrochemicals and environmental cleanup. Recently, the Richards' research group has developed techniques to produce a number of new nanoscale materials that have demonstrated unique catalytic activities through controlled faceting as well as novel intercalation strategies that impart robustness. Here, an overview of the recent highlights regarding these materials and their application in catalytic applications will be presented.

Monday, 24. September 2018, 15:15 Uhr Seminarraum 2 der Fakultät für Chemie Währinger Straße 42, 1090 Wien

Freddy Kleitz Institut für Anorganische Chemie – funktionelle Materialien