

UniCat Colloquium

(www.unicat.tu-berlin.de)

Lecturer: **Prof. Dr. Sascha Ott**, Department of

Photochemistry and Molecular Science,

Uppsala University, Sweden

Title: Hydrogen from Bioinorganic Models of the

[FeFe] Hydrogenase Active Site

Abstract: [FeFe] hydrogenase enzymes reversibly catalyze the reduction of protons to molecular hydrogen as part of the metabolism of certain cyanobacteria

and algae. Bioinorganic models of their active site provide valuable insights into the mechanism of the enzymes. Catalytically active biomimetic complexes may provide an alternative to platinum and palladium that are currently used as catalysts for the generation of hydrogen and its oxidation in fuel cells. Powered by a suitable photosensitizer, hydrogen may become available from our model complexes photochemical, with light being the only energy input.

In this seminar, all aspects of our work on functional models of the [FeFe]

hydrogenase active site will be presented: From catalyst design,

synthesis and characterization to catalytic studies in electrochemical and

photochemical assays.

Date: Wednesday, 3 March 2010

Time: 5:15 pm - around 6:45 pm

Location: TU Berlin

Institute of Chemistry, Building C

Straße des 17. Juni 115, 10623 Berlin

room C 243

Organiser: PD Dr. Michael Haumann (FUB)

Coffee and tea will be served thirty minutes prior to the lecture start. Guests are cordially invited to attend!

Prof. Dr. Matthias Driess, Chair of the Cluster of Excellence UniCat