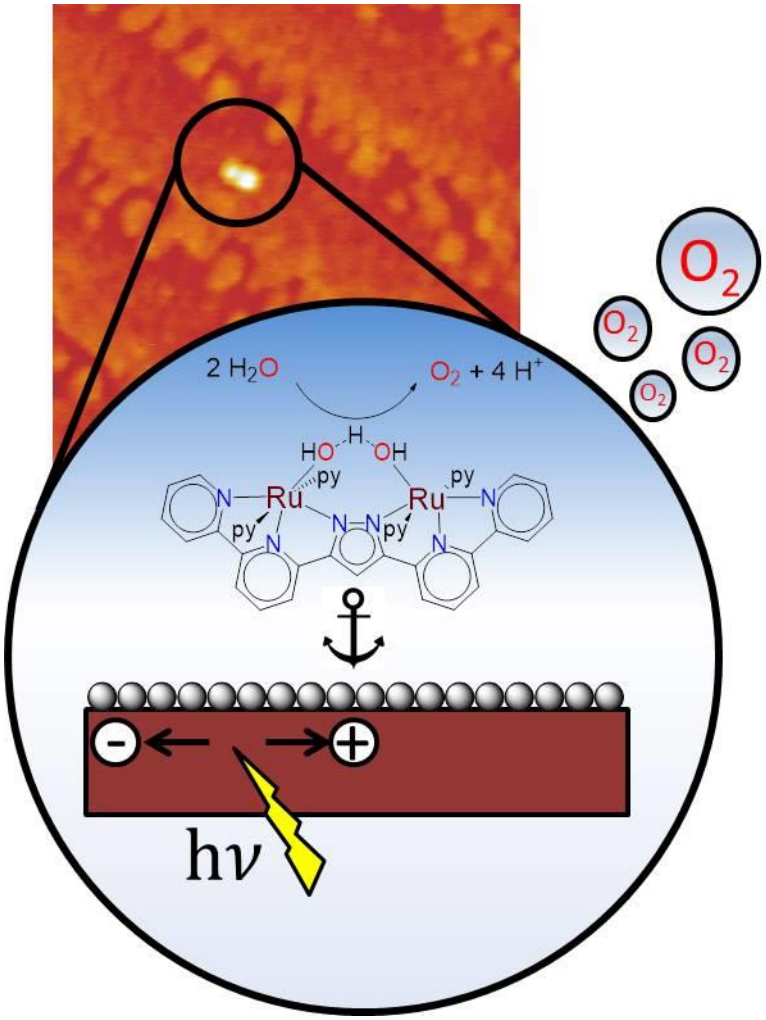

C01 job profile:

Project C01 aims to control multi-step charge transfer catalysis by cooperative processes in hybrid assemblies of solid oxides and molecular catalysts. We study electron- and light-driven reduction of CO_2 and oxidation of H_2O, which are key examples for such multi-step charge transfer processes and both relevant to artificial photosynthesis. It is your role to synthesize the hybrid systems in a close collaboration between the Institute of Materials Physics (Prof Jooss) and Institute of Inorganic Chemistry (Profs Meyer and Siewert).

You will then study the mechanisms of charge transfer across the molecular-oxide interface and its impact on the chemical kinetics at the molecular catalyst.

We are looking for an excellent PhD candidate with an above-average university degree in physics, chemistry or materials sciences. You are enthusiastic about the subject and you are interested in understanding scientific mechanisms in detail. You are a team-worker and you may have appropriate prior knowledge in thin film and surface characterization techniques or in (photo)-electrochemistry.

The Collaborative Research Center CRC 1073 „Atomic scale control of energy conversion“ at the Georg-August Universität Göttingen and collaborating institutions invite applications for a

PhD Position

(Salary group 13 TV-L, at least 50 %, i.e.19.9 h/week)

Hybrid assemblies for fundamental studies of photo-induced multi-step charge transfer catalysis

in the Project C01 (Principal investigators Prof. Christian Jooss, Prof. Inke Siewert, Prof. Franc Meyer). The position will start at the earliest by October 1st 2017 and is limited to three years.

Your tasks and duties:

You will drive research in fundamental mechanisms of energy conversion in complex materials down to the atomic scale. You will work in a team of highly motivated researchers from different scientific disciplines and contribute to the development of an improved microscopic understanding of elementary steps of energy conversion in materials with tunable excitations and interactions. You are expected to participate in the structured doctoral program of the CRC and to enjoy an intense collaboration with the other PhD students of the collaborative research center. For further detailed information, please refer to our website: www.sfb1073.uni-goettingen.de. In your application, please mention explicitly the project C01 (group Jooss, Institute of Materials Physics).

Job profile:

Project C01 aims to control multi-step charge transfer leading to chemical reactivity by cooperative processes in hybrid assemblies of solid oxides and immobilized molecular catalysts. We study electron- and light-driven reduction of CO_2 and oxidation of H_2O, which are key examples for multi-step charge transfer catalysis relevant to photosynthesis. It is your role to built up oxide absorber platforms via physical vapor deposition technqiues in the Institute of Materials Physics and study the effect of the interface on the charge transfer process to molecular catalysts provided by the Institute of Inorganic Chemistry.

We are looking for excellent PhD candidates with an above-average university degree in physics, chemistry or materials sciences. You dispose of a very good knowledge in English both in writing and speaking. Good German language skills are desirable. You are enthusiastic about the subject and you are interested in understanding scientific mechanisms in detail. You are a team-worker and you possibly dispose of the appropriate prior knowledge in thin film and surface characterization techniques and (photo)-electrochemistry.

The University of Göttingen is an equal opportunities employer and places particular emphasis on fostering career opportunities for women. Qualified women are therefore strongly encouraged to apply in fields in which they are underrepresented. The university has committed itself to being a family-friendly institution and supports their employees in balancing work and family life. The mission of the University is to employ a greater number of severely disabled persons. Applications from severely disabled persons with equivalent qualifications will be given preference. Please send your application either in electronic form or via mail – only in copies – by 30 September to the Georg-August-Universität Göttingen:

Contact: Georg-August-Universität Göttingen
SFB 1073 - Office
Friedrich-Hund-Platz 1, 37077 Göttingen
eMail: SFB1073@ump.gwdg.de

If you have any questions, feel free to contact the head office or participating group leaders. For contact data please refer to our homepage.