

DOCTORAL FELLOWSHIP IN FEMTOSECOND PHOTOELECTRON SPECTROSCOPY ON SOLVATION DYNAMICS AT SURFACES

The Universität Duisburg-Essen – Fakultät für Physik invites applications for a doctoral fellowship in the research field of the Cluster of Excellence “Ruhr Explores Solvation” (RESOLV).

RESOLV is funded within the German Excellence Initiative and aims at establishing “Solvation Science” as an overarching research topic in the Ruhr area. The mission of RESOLV is to launch Solvation Science as a new interdisciplinary field to understand the influence of solvation on reactions, the function of biomolecules, and processes at interfaces. RESOLV aims to create an interdisciplinary framework for understanding solvent processes that is universal and adds a predictive capability.

The project entitled *Restricted solvation dynamics at solid interfaces* aims at the investigation of solvation dynamics in anisotropic, spatially restricted surroundings. Femtosecond time-resolved two-photon photoelectron spectroscopy will be used to investigate the ultrafast dynamics of solvated electronic states of alkali ions surrounded by water molecules. This fellowship will be hosted at the Faculty of Physics at the University of Duisburg-Essen (Prof. Uwe Bovensiepen). The applicant is expected to have experience with ultrahigh vacuum equipment and / or ultrafast laser pulses. Interest in fundamental physical chemistry and/or ultrafast spectroscopy is essential. The applicant will work in a team on a cutting edge collaborative project involving complementary activities of world leading experts in experiment (scanning tunneling microscopy) and theory (complex molecular many-body systems).

The metropolis areas Ruhr and Lower Rhine are characterized by a high density of universities and research institutions. Relevant additional information can be found at www.rub.de/solvation and www.uni-due.de/agbovensiepen/.

The proposed starting date for the position is as soon as possible. Applications should include a detailed curriculum vitae. The Universität Duisburg-Essen (UDE) is committed to employ more handicapped individuals and especially encourages them to apply. The UDE wishes to increase the share of women in areas, where they are underrepresented and strongly encourages them to apply.

Complete applications should be sent exclusively in electronic form as one pdf document to E-Mail: uwe.bovensiepen@uni-due.de