

PHD POSITIONS AVAILABLE

Surface-selective functionalization of inorganic semiconductors

Within the Collaborative Research Center "Hybrid Inorganic/Organic Systems for Opto-Electronics" (CRC 951), two PhD positions are open immediately. Their tasks will be to first understand and then design the electronic properties of interfaces between such fundamentally different materials classes as inorganic and molecular semiconductors. Using state-of-the-art methods of ab-initio electronic structure calculation, self-assembled monolayers (SAMs) of organic molecules covalently bonded to inorganic surfaces will be developed from first-principles to improve the performance of hybrid opto-electronic devices and explore concepts for new functionality.

We are looking for: Two qualified and motivated individuals with a Masters Degree in Physics, Chemistry, or comparable with a focus on solid-state theory, quantum chemistry, materials science, nanotechnology, surfaces/interfaces, or molecular/organic electronics. Experience in electronic-structure calculations using density-functional theory and/or wave-function based codes is required and, naturally, general computer and software skills are indispensable.

We offer: The chance to work in an equally international and interdisciplinary team of renown researchers and fellow students on the buzzing Science & Technology Campus Adlershof of the Humboldt-University Berlin. Both within the five academic and non-university institutions that participate in CRC 951 and outside, the vibrant capital of Germany offers diverse opportunities for interaction, learning, and living.

Both positions are available as of now and will remain open until filled. Applications should include a Letter of Motivation (max. one page), a Curriculum Vitae, a List of Publications, conference/workshop participations and other professional/career-related activities, as well as names and contact details of two established researchers (e.g., thesis supervisor) as personal References. The Humboldt-Universität zu Berlin is a family friendly and equal-opportunity institution. Women are particularly encouraged to apply and disabled persons will be preferentially employed in case of comparable qualification. Send applications in German or English to [Dr. Georg Heimel](mailto:georg.heimel@physik.hu-berlin.de) (if possible as pdf via Email):