As a University of Excellence, Universität Hamburg is one of the strongest research universities in Germany. As a flagship university in the greater Hamburg region, it nurtures innovative, cooperative contacts to partners within and outside academia. It also provides and promotes sustainable education, knowledge, and knowledge exchange locally, nationally, and internationally.

The Faculty of Mathematics, Informatics and Natural Sciences, Department of Chemistry, Institute of Physical Chemistry invites applications for two

**RESEARCH ASSOCIATES**
**FOR THE PROJECT “NANOHYBRID”**
**IN TWO NANOSCIENCE SUBPROJECTS**
- SALARY LEVEL 13 TV-L -

The positions in accordance with Section 28 subsection 3 of the Hamburg higher education act (Hamburgisches Hochschulgesetz, HmbHG) commences on 01.04.2021.

These are fixed-term contracts in accordance with Section 2 of the academic fixed-term labor contract act (Wissenschaftszeitvertragsgesetz, WissZeitVG). The terms are fixed for a period of 3 years. The positions call for 50% of standard work hours per week**.

**RESPONSIBILITIES:**
Duties primarily include teaching and research. Research associates may also pursue independent research and further academic qualifications.

**SPECIFIC DUTIES:**
The DFG-funded Research Training Group NANOHYBRID (GRK 2536) includes 15 research projects in the fields of chemical synthesis, physical characterization, and theoretical modeling. Within a strongly interdisciplinary approach, the members of the Research Training Group will develop innovative methods to tailor the shape and function of nanoscopic systems using modern concepts of inorganic, macromolecular, and theoretical chemistry. An essential characteristic of the research and training program is the strong interaction between experiment and theory, which will lead to a deep understanding of the collective properties of inorganic hybrid structures.

Further information on the conception of the Research Training Group are summarized at: www.grk-nanohybrid.uni-hamburg.de.

* Full-time positions currently comprise 39 hours per week.
The application, selection and recruitment processes are well advanced. It is still possible to apply for two subprojects.

First subproject:
The 3-years position at the interface of inorganic nanostructures, protein chemistry and spectroscopy is available in the group of Prof. Dr. Tobias Beck

https://www.chemie.uni-hamburg.de/institute/pa/arbeitsgruppen/beck.html

The research will focus on the design and synthesis of novel biohybrid nanostructures based on protein containers and anisotropic inorganic nanoparticles and the characterizations of their optical properties. Further characterizations will involve diffraction and scattering methods (e.g. SAXS) and microscopy (AFM, TEM, cryo-TEM).

Second subproject:
The 3-years position at the interface of synthesis, catalysis, photochemistry, and spectroscopy is available in the group of Prof. Dr. Axel Jacobi von Wangelin.

https://www.chemie.uni-hamburg.de/institute/ac/arbeitsgruppen/jacobi.html

The research will focus on the design of stimuli-responsive molecules and materials based on organic and organometallic structures, their evaluation as molecular or nanoparticular catalysts and the elucidation of reaction mechanisms.

Both projects will be executed in close collaboration with theoretical and experimental groups within the Research Training Group “NANOHYBRID”.

**REQUIREMENTS:**

A university degree in a relevant field. I.e, University B.Sc. and M.Sc. degrees in Chemistry/Nanosciences/Biochemistry and proficient knowledge of English language. Prospective students have graduated with very good grades from B.Sc. and M.Sc. programs. Solid English skills (both written and oral) are mandatory; the willingness to learn German is desirable.

Special requirements for the first subproject at the Group of Prof. Dr. Tobias Beck:
Applicants should have a background in chemistry or biochemistry, with a strong excitement for experimental research. Previous knowledge in protein purification, protein design and/or protein crystallization is desirable. The candidate should enjoy working in an interdisciplinary team environment and must have excellent communication skills.

Special requirements for the second subproject at the group of Prof. Dr. Axel Jacobi von Wangelin:
Applicants should have a strong background in the synthesis of functionalized organic and organometallic molecules and be well trained in the handling and characterization of sensitive molecules and the application of modern spectroscopic methods.
The Free and Hanseatic City of Hamburg promotes equal opportunity. As women are currently underrepresented in this job category at Universität Hamburg according to the evaluation conducted under the Hamburg act on gender equality (Hamburgisches Gleichstellungsgesetz, HambGleiG), we encourage women to apply for this position. Equally qualified and suitable female applicants will receive preference.

Qualified disabled candidates or applicants with equivalent status receive preference in the application process.

For further information, please contact tobias.beck@chemie.uni-hamburg.de or axel.jacobi@uni-hamburg.de or consult our website at www.grk-nanohybrid.uni-hamburg.de. Applicants shall firstly study the Research Training Group’s web page to familiarize with the specific research projects of the scientific program and the application procedure.

Applications should include a one-page motivation letter regarding to the selected project, curriculum vitae, the master thesis, all degree certificates (BSc. And MSc.) and all the transcript of study records. Please send applications as a single PDF file by February 15, 2021 to: grk-nanohybrid@chemie.uni-hamburg.de.

Please do not submit original documents as we are not able to return them. Any documents submitted will be destroyed after the application process has concluded.