



Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

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 Physics, the Institute of Experimental Physics and Center for Hybrid Nanostructures invites applications for two

RESEARCH ASSOCIATES FOR THE PROJECT “SIS MULTILAYER STRUCTURES FOR APPLICATIONS IN SUPERCONDUCTING RADIO-FREQUENCY TECHNOLOGY (SMART)”

- SALARY LEVEL 13 TV-L -

The position in accordance with Section 28 subsection 3 of the Hamburg higher education act (Hamburgisches Hochschulgesetz, HmbHG) commences on as soon as possible.

This is a fixed-term contract in accordance with Section 2 of the academic fixed-term labor contract act (Wissenschaftszeitvertragsgesetz, WissZeitVG). The term is fixed until 30.06.2022. The contract may be extended to three years. The position calls for 50 % of standard work hours per week**.

RESPONSIBILITIES:

Duties include academic services in the project named above. Research associates may also pursue independent research and further academic qualifications.

SPECIFIC DUTIES:

The main focus of the superconducting radio-frequency (SRF) R&D program is to operate superconducting accelerators with a higher versatility, enabled by tailoring the properties of the inner cavity surface. The related investigations are additionally funded by a dedicated BMBF research project and would be carried out in close collaboration with the Helmholtz Centre DESY, one of the worlds leading research centers for accelerator physics. To better understand recent discoveries of cavity surface treatments, a thorough investigation of material and SRF parameters of samples will be pursued. In the beginning, studies on samples and later on cavities will be done by you in collaboration with our partners. Your task will include:

* Full-time positions currently comprise 39 hours per week.

- Sample preparation and treatment, including clean-room work, sample chemistry and heat treatments or coating techniques such as PVD or ALD
- Surface characterization of samples with advanced material analysis techniques (SEM/EDX, SIMS, EBSD, XPS, XRR)
- Taking part in national and international collaborations and workshops and represent our research

REQUIREMENTS:

A university degree in a relevant field.

- Knowledge of thin film processing or surface analysis techniques are preferred
- Knowledge in superconductivity, metallurgy or accelerator technology is of advantage
- Experience with vacuum furnace systems and/or chemical treatment of surfaces is of advantage
- Good knowledge of English is required and knowledge of German is of advantage

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 Dr. Marc Wenskat (marc.wenskat@desy.de).

Applications should include a cover letter, a tabular curriculum vitae, and copies of degree certificate(s). Please send applications by 01.05.20 to: marc.wenskat@desy.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.