

**The Faculty of Mathematics, Informatics and Natural Sciences / Department of Physics / Institute of Nanostructure and Solid-state Physics (INF)** invites applications for a

## RESEARCH ASSOCIATE FOR THE PROJECT “Ultrafast soft X-ray spectroscopy in the liquid phase”

- New instrumentation for XFEL science -  
- SALARY LEVEL 13 TV-L -

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The position in accordance with Section 28 subsection 3 of the Hamburg higher education act (Hamburgisches Hochschulgesetz, HmbHG) commences on November 1<sup>st</sup>, 2019.

This is a fixed-term contract in accordance with Section 2 of the act on fixed-term academic contracts (Wissenschaftszeitvertragsgesetz, WissZeitVG). The position is currently financed until July 30<sup>th</sup> 2022 with 39 hours per week.

### Responsibilities:

The position includes academic work within the frame of the project. Research associates may also pursue independent research and further academic qualifications.

### Specific Duties:

The Condensed Phase Dynamics Group at Universität Hamburg and the free-electron laser facility FLASH at DESY are currently seeking a highly motivated and ambitious candidate for a postdoctoral position on dynamics of solution phase molecular and functional materials systems.

The position is part of an instrumentation project to realize and employ a high-resolution femtosecond soft X-ray spectrometer to develop a microscopic picture of ultrafast processes in photoexcited solvated molecules and colloidal nanoparticles.

The successful candidates will plan, perform and lead experimental efforts on femtosecond soft X-ray spectroscopy at FLASH as well as experiments at synchrotron radiation facilities and femtosecond X-ray sources in collaboration with local and international partner groups.

### Requirements:

A university degree in a relevant field. Specifically, a PhD degree is required - preferably in physics and related disciplines with a strong focus on instrumentation and experiments.

Experience with a least one of the following fields is required (two or more are a clear asset):

- (a) design, setup, and use of ultrafast laser systems
- (b) design, setup, and use of vacuum systems
- (c) X-ray spectroscopy techniques
- (c) programming and digital interfacing of equipment and/or data acquisition/processing
- (d) modeling of scattering, spectroscopic, or time-resolved data

The collaboration with several partner groups on instrumentation, experiments and in the analysis of theory results requires organizational talent, pronounced team spirit, and excellent communication skills in English (spoken and written). Knowledge of software packages such as Matlab, Python, AutoCAD or related software is a further asset for this position.

The University aims to increase the number of women in research and teaching and explicitly encourages women to apply. Equally qualified female applicants will receive preference in accordance with the Hamburg act on gender equality (Hamburgisches Gleichstellungsgesetz, HmbGleiG).

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

For further information, please contact Prof. Dr. Nils Huse, Dr. Martin Beye or consult the web: [https://www.physnet.uni-hamburg.de/fachbereich-physik/institute/inf/inf/huse\\_e.html](https://www.physnet.uni-hamburg.de/fachbereich-physik/institute/inf/inf/huse_e.html).

Applications should include a cover letter, a tabular curriculum vitae, and copies of degree certificate(s). Please send applications to: [nils.huse@uni-hamburg.de](mailto:nils.huse@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.