



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.

Pending approval of external funding the Faculty of Mathematics, Informatics and Natural Sciences, Department of Physics, Institute for Nanostructure and Solid State Physics invites applications for a

## RESEARCH ASSOCIATE FOR THE PROJECT

# “ERC CONSOLIDATOR GRANT LINCHPIN: A PLATFORM TO LINK CHEMISTRY AND PHYSICS OF COLLOIDAL NANOMATERIALS”

- 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 01.03.2021.

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 for a period of 3 years. The position calls for 66% 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:

- establishing fundamental knowledge about the electronic properties of colloidal nanomaterials, particularly transition metal nitrides and sulfides,
- synthesis of 2D transition metal and nitrides,
- XES measurements on laboratory and large-scale instrumentation, particularly design and conduct experiments on nanoparticles in solution
- characterization of nanoparticles with various laboratory techniques (SEM/PXRD/AFM...),
- helping in optimization & testing XES in-situ cell at the synchrotron,
- work with the LINCHPIN team on in-situ XES studies.

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

## REQUIREMENTS:

A university degree in a relevant field. The candidate should have a Master Diploma in Physics, Chemistry, Material Science, Nanosciences or a related field. Experience with X-ray spectroscopic methods (XAS/XES) and strong expertise in data analysis and interpretation is required. Knowledge of FEFF simulation or similar is desired. PDF /Rietveld refinement analysis is a strong plus.

Experience with 2D inorganic nanoparticle synthesis (preferably TM sulfides) and exfoliation in solution and their characterization is a strong plus. Excellent communication in English is necessary.

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 Prof. Dorota Koziej or consult our website at [www.thekoziejlab.com](http://www.thekoziejlab.com).

Applications should include a cover letter, a tabular curriculum vitae, and copies of degree certificate(s). Please send applications by 15.01.2021 to: [Team-dk@physnet.uni-hamburg.de](mailto:Team-dk@physnet.uni-hamburg.de) please include in the title of your e-mail ERC LINCHPIN PhD02.

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.