



Faculty/Departement Mathematics, Informatics, Natural Sciences /Physics
Seminar/Institute Institute of Nanostructure and Solid-State Physics (INF) and the Center for Hybrid Nanostructures (CHyN)

Universität Hamburg invites applications for a Research Associate in accordance with Section 28 subsection 1 of the Hamburg Higher Education Act (Hamburgisches Hochschulgesetz, HmbHG). The position commences on August 1st, 2017.

It is remunerated at the salary level TV-L 13 and calls for 50% of standard work hours per week.*

The fixed-term nature of this contract is based upon Section 2 of the Academic Fixed-Term Labor Contract Act (Wissenschaftszeitvertragsgesetz, WissZeitVG). The initial fixed term is three years.

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

Responsibilities:

Associates will be expected primarily to conduct and teach research. The associate will have the opportunity to pursue further academic qualifications, in particular a doctoral dissertation. At least one-third of set working hours will be made available for the associate's own academic work.

Specific Duties:

The newly established Hybrid Nanostructure Group in the Center for Hybrid Nanostructures (CHyN), at Campus Bahrenfeld, is currently searching for potential candidates for a doctoral position on additive printing of functional materials.

The PhD candidate will help developing a technology for fabrication of hybrid structures. This will involve synthesis and assembly of colloidal nanoparticles, incorporation nanoparticles within polymer matrices and development of 3D printing platform to enable the fabrication of multifunctional materials.

The candidate will set-up an additive printing experimental station and focus on various chemical, physical and technical aspects related to nanoparticle-based additive manufacturing. Additionally, the candidate will either independently, or in the collaboration with the group members test functionality of devices.

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



The candidates will be also involved in synchrotron-based structure-function measurements in collaboration within the Hybrid Nanostructure Group and international collaborators.

In accordance with the mandatory teaching assignment the teaching load will be 2 hours per week.

Requirements:

A university degree in a relevant field. Master's degree in Nanoscience, Chemistry, Physics, Materials Science, or other closely related areas. This is a highly interdisciplinary project and students with an interdisciplinary background are highly encouraged.

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

- (a) additive manufacturing (incl. inks formulation),
- (b) colloidal synthesis and assembly of nanoparticles into 1-, 2- or 3-D structures,
- (c) nanoparticle structure and properties characterisation methods (like SEM, TEM, PXRD),
- (d) photo-electro-chemical characterisation of multifunctional devices.

Excellent communication skills in English (spoken and written), knowledge of Matlab, AutoCAD (or similar software) are further assets for this position.

Severely disabled applicants will receive preference over equally qualified non-disabled applicants.

For further information, please contact Prof. Dr. Dorota Koziej, or consult our website at www.theKoziejLab.com.

Applications should include a cover letter, curriculum vitae, and copies of degree certificate(s). The application deadline is 16/06/2017. Reviewing of the applications had already begun, and will continue until the position is filled. Please send applications to: Prof. Dr. Dorota Koziej, (dorota.koziej@uni-hamburg.de). Application should be accompanied by letters of references send directly from the reference persons to dorota.koziej@uni-hamburg.de.