

**Faculty/Department:** Mathematics, Informatics, Natural Sciences/Physics  
**Seminar/Institute:** CUI: Advanced Imaging of Matter

Universität Hamburg invites applications for a Research Associate for the project “**Cluster of Excellence 'Advanced Imaging of Matter' - Understanding Protein Crystal Disorder through Diffuse Scattering**” in accordance with Section 28 subsection 3 of the Hamburg higher education act (Hamburgisches Hochschulgesetz, HmbHG). The position commences on 16 April 2019.

It is remunerated at the salary level TV-L 13 and calls for 39 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 term is fixed to 15 April 2021.

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).

#### **Responsibilities:**

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

#### **Specific Duties:**

Neither proteins nor their crystals, which are used to determine their structure, are static or perfectly ordered. When crystals are disordered, in addition to conventional Bragg diffraction, one observes diffuse scattering which has the potential to be used to understand the structure and equilibrium dynamics of the molecules better. You will be analyzing this diffuse scattering data and using it to model collective motions in the molecules.

#### **Requirements:**

A university degree in a relevant subject plus doctorate. The candidate should have some experience with molecular dynamics modelling (coarse-grained or atomistic) of biomolecules. X-ray diffraction experience would be useful.

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

For further information, please contact Kartik Ayyer ([kartik.ayyer@mpsd.mpg.de](mailto:kartik.ayyer@mpsd.mpg.de), 49 40 8998 88150) or consult our website at <https://kartikayyer.com>.

Applications should include a cover letter, curriculum vitae, and copies of degree certificate(s). The application deadline is 1 March 2019. Please send applications to: [kartik.ayyer@mpsd.mpg.de](mailto:kartik.ayyer@mpsd.mpg.de).