

Faculty/Department: Mathematics, Informatics, Natural Sciences/Chemistry or 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' - Machine learning to unravel key reaction coordinates in chemical reactions**” in accordance with Section 28 subsection 3 of the Hamburg higher education act (Hamburgisches Hochschulgesetz, HmbHG). The position commences on 1 June or later.

It is remunerated at the salary level TV-L 13 and calls for 75 % 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 term is fixed for a period of 3 years.

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:

- Development and testing of machine learning techniques for reaction coordinate extraction.
- Application of these techniques to both simulation and experimental data.
- Development of generalized models for a low-dimensional understanding of chemical reactivity.

Requirements:

A university degree in a relevant field. Programming experience (e.g. with Python) is required. Experience with machine learning and artificial intelligence is a plus. Computer Scientists with some natural science knowledge are encouraged to apply.

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

For further information, please contact Ralph Welsch (ralph.welsch@desy.de) or consult our website at <https://desy-theory.cfel.de/>.

Applications should include a cover letter, curriculum vitae, and copies of degree certificate(s). The application deadline is 31 March. Please send applications to: Ralph Welsch (ralph.welsch@desy.de).

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