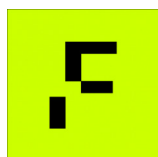


**Freie Universität Berlin****Research assistant (praedoc) (m/f/d)**

City: Berlin; Starting date (earliest): At the earliest possible; Duration: befristet bis zum 30.06.2029; Remuneration: Entgeltgruppe 13 TV-L FU; Reference number: 616; Closing date: 23/02/26

**Tasks****Who We Are**

Are you passionate about cutting-edge fundamental research on molecular and 2D materials heterostructures? Are you looking to pursue your PhD in an excellent, interdisciplinary research environment at a leading German university? If so, we invite you to apply!

The newly established Collaborative Research Center CRC 1772 "mol2Dmat" investigates novel collective states and quantum phenomena in heterostructures of molecules and two-dimensional materials. Our interdisciplinary consortium brings together 20 research groups from Freie Universität Berlin, Humboldt-Universität zu Berlin, Technische Universität Berlin, and the Max Planck Institute in Hamburg. Our work combines physics, chemistry, and materials science – pushing the frontiers of quantum materials research.

The overarching goal of the Collaborative Research Center (CRC) 1772 is to explore and harness previously inaccessible collective phenomena and ground states in heterostructures of molecules and two-dimensional materials. Two-dimensional (2D) materials are atomically thin crystals that may be stacked into heterostructures with new and totally unexpected properties. CRC 1772 takes this to the next level by creating and studying heterostructures of organic and inorganic molecules encapsulated inside 2D materials.

**What You Can Expect in Your New Role**

As a PhD student, you will become part of an excellent scientific network and benefit from our structured, interdisciplinary graduate program, which includes tailored training, workshops, retreats, and conference travel. You will have access to cutting-edge laboratories, individual supervision, and a wide range of development opportunities. We are committed to family and academic life being compatible and promoting diversity and equal opportunity through a variety of support measures.

We offer a PhD position at the Department of Physics at Freie Universität Berlin starting as soon as possible. Contribute to research in the subproject C05 of CRC 1772 “One-dimensional molecular chains through nanotubes” under supervision of Dr. Setaro.

- Realization of one-dimensional molecular assemblies through carbon and boron nitride nanotubes
- Physico-chemical methods for the growth and characterization of the molecular-tubes heterostructures, as well as optical spectroscopies for the investigation of the molecule-molecule and molecule-tube interactions.

## Requirements

### Key Requirements

Master in Physics or a closely related field. (Requirement)

### Desirable

- Excellent Master degree with courses in solid-state and molecular physics or closely related fields.
- Experimental expertise in research on solid-state or molecular physics.
- Good familiarity with synthetic and spectroscopic physico-chemical techniques.
- Research expertise of several months (e.g., during a Master thesis).
- Experience in the treatment and characterization of single-walled carbon nanotubes.
- Wet and dry filling approaches of carbon and boron nanotubes.
- Excellent command of written and oral English (B2).
- Experience in the presentation of scientific results in written and oral forms, e.g., during seminar presentation and as a written manuscript.
- Dedication towards scientific work, high motivation for pursuing a PhD thesis.

We are interested in a diverse research community and particularly encourage members of underrepresented groups to apply.

## What we offer

- Salary in line with the collective agreement for the civil service at the state level (TV-L FU), plus additional one-off annual payment
- Flextime with proportional allowance of days for working from home
- Good work-life balance thanks to flexible working hours makes family and care responsibilities easier to manage
- Thirty days of vacation (based on a five-day working week)
- Office closed on December 24 and December 31
- Numerous training and continuing education options for professional and personal development
- Opportunity to participate in University Sports Center courses and the health promotion program

## Application

Did we raise your interest?

We look forward to receiving your detailed application, which should include: a cover letter, your tabular CV, and your certificates (BSc, MSc) and transcripts. Please explain why your academic and scientific expertise has prepared you for this research project.

Please send us your application via our [online recruiting portal](#) by clicking on the “Apply now” button. From there, you will be redirected to create a profile. This is only necessary for first-time applicants.

Further information is available from Dr. Setaro (+49 030 838 56156).

Schwerbehinderte werden bei gleicher Qualifikation bevorzugt berücksichtigt.

Die Freie Universität Berlin fordert Frauen sowie Personen mit Migrationsgeschichte ausdrücklich zur Bewerbung auf.

Vorstellungskosten können von der Freien Universität Berlin leider nicht übernommen werden.

Bewerbungsunterlagen werden nicht zurückgesandt. Bitte reichen Sie Ihre Unterlagen nur in Kopie ein

More information at <https://stellenticket.de/201498/BUA/>  
Offer visible until 23/02/26

