

Freie Universität Berlin - Fachbereich Biologie, Chemie, Pharmazie - Fachbereichsbibliothek Biologie, Chemie, Pharmazie



Are you enthusiastic about cutting-edge basic research on molecular and 2D material heterostructures? Would you like to complete your doctorate in an excellent, interdisciplinary research environment at a leading German university? Then we invite you to apply! The newly established Collaborative Research Centre SFB 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 and pushes the boundaries of quantum materials research. The overarching goal of the Collaborative Research Centre (SFB) 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 can be stacked to form heterostructures with new and completely unexpected properties. SFB 1772 goes one step further by combining heterostructures made of organic and inorganic molecules encapsulated in 2D materials. As a doctoral student, you will become part of an excellent scientific network and benefit from our structured, interdisciplinary graduate programme, which includes tailor-made training courses, workshops, retreats and conference trips. You will have access to state-of-the-art laboratories and theoretical methods, individual supervision, and a wide range of development opportunities. We are committed to promoting work-life balance and diversity and equal opportunities through a variety of support measures. We are offering a doctoral position at the Department of Chemistry at Freie Universität Berlin starting on 1 April 2026.

Research assistant (praedoc) (m/f/d)

with 75%part-time job limited to 30.06.2029 salary grade (Entgeltgruppe) 13 TV-L FU
reference code: 2502_WIMI_CRC1772_2

City: Berlin; Starting date (earliest): At the earliest possible; Duration: limited to 30.06.2029; Remuneration: salary grade (Entgeltgruppe) 13 TV-L FU; Reference number: 2502_WIMI_CRC1772_2; Closing date: 06/04/26

Tasks

Job description:

Contribute to research and academic self-administration in the following project.
C01 - Synthesis of organic dyes and redox systems for controlled assembly in mol2Dmat heterostructures
(Prof. Eigler)

- Synthesis of molecular dyes with donor-acceptor function suitable for binding to systems.
- Synthesis of redox systems based on the interplay of aromaticity and anti-aromaticity.
- Organic synthesis and typical characterisation methods, such as NMR, FTIR, MS, EA, UV-vis and fluorescence spectroscopy, cyclic voltammetry.

Requirements

Requirements:

Completed university degree (M.Sc. or Diploma degree) in Chemistry or related subjects.

Desirable:

- Experimental or theoretical experience in research in the field of synthetic chemistry.
- Excellent Master's degree with courses in synthetic or closely related fields.
- Several months of research experience (e. g. as part of a Master's thesis). Ideally, the experimental or theoretical methods you have mastered should correspond to the research direction of your desired project.
- Very good written and spoken English (B2).
- Very good written and spoken German (B2).
- Experience in presenting scientific results in written and oral form, e. g. in seminar presentations and as written manuscripts.
- Commitment to scientific work, high motivation for a doctoral thesis.

Application

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

Applications should be sent by e-mail, together with significant documents, indicating the **reference code, no later than April 6th 2026** in PDF format (preferably as one document) to Prof. Dr. Siegfried Eigler: melanie.wellmann@fu-berlin.de or postal to

Freie Universität Berlin
Fachbereich Biologie, Chemie, Pharmazie
Fachbereichsbibliothek Biologie, Chemie, Pharmazie
Herrn Prof. Dr. Siegfried Eigler
Altensteinstr. 23a
14195 Berlin (Dahlem)

With an electronic application, you acknowledge that FU Berlin saves and processes your data. FU Berlin cannot guarantee the security of your personal data if you send your application over an unencrypted connection.

Freie Universität Berlin is an equal opportunity employer

More information at <https://stellenticket.de/202627/BUA/>
Offer visible until 06/04/26

