

Fachbereich Geowissenschaften - Institut für Geologische Wissenschaften

Research assistant (praedoc) (m/f/d) with 75%part-time job limited to 3 years salary grade (Entgeltgruppe) 13 TV-L FU reference code: UNINORD_2025

Deadline: 27.01.2025

The Institute of Geological Sciences at Freie Universität Berlin invites applications for a Research Associate (Praedoc) position in the Paleoclimatology Group led by Prof. Stefanie Kaboth-Bahr. Our research group focuses on improving our understanding of past climate and ecosystems, emphasizing the interplay between climate processes at various latitudes and connections between marine and terrestrial climate systems. This knowledge aids in assessing future scenarios in a world increasingly shaped by human influence.

Job description:

The intensifying climate crisis will pose Europe with major challenges in the coming decades, affecting natural resources, food security, water availability, and public health. However, climate models predicting future changes often contain uncertainties. To help bridge these gaps, studying geological analogs, such as the Pliocene Epoch (approximately 5.3 to 2.6 million years ago), offers promising insights. This period reflects climate conditions comparable to those forecasted for the mid-21st century, providing valuable perspectives on potential impacts and adaptation strategies.

The present DFG-funded project aims to build a comprehensive dataset on climate change in Central Europe during the early to late Pliocene (2.5 to 4.7 million years ago). Emphasis will be placed on phases with high and low pCO₂ values, examining the impact on warm and cold climates within this epoch. A sediment core from the Heidelberg Basin in the northern Upper Rhine Graben will form the foundation of this study. The project approach includes a multi-proxy methodology encompassing facies analysis, XRF core scanning, borehole geophysics, heavy mineral and clay mineral geochemistry, and numerical modeling. By integrating proxy data from terrestrial clastic sequences, we aim to derive precise climate information.

The project is conducted in close collaboration with project partners Prof. Dr. Laura Stutenbecker (University of Münster) and Prof. Dr. Matthias Hinderer (Technical University of Darmstadt).

Key Responsibilities:

- Conduct research on reconstructing paleoclimatic changes in Central Europe during the Pliocene Epoch.
- Perform XRF scanning, sediment facies analysis, and gamma-ray measurements on the UniNord2 sediment core.
- Sample sediments from the core and field sites for reference purposes.
- Process and analyze sediment samples in the lab (geochemistry, XRD, grain size, heavy mineralogy).
- Analyze and interpret collected data using multivariate statistical methods.
- Publish research findings in peer-reviewed journals and present results at conferences.
- Collaborate closely with project partners Prof. Dr. Laura Stutenbecker and Prof. Dr. Matthias Hinderer, members of the Paleoclimatology research group, and additional researchers at Freie Universität Berlin.

We Offer:

- Salary according to the TV-L public service pay scale (E13).
- Opportunities to present research at conferences and publish in peer-reviewed journals.
- Access to modern research facilities.
- Flexible working hours in a family-friendly environment.
- Career training and development through the Dahlem Research School.

Requirements:

- Master's degree in geosciences or a closely related discipline by the start of the position.

Desirable:

- Experience in sedimentology (e.g., facies analysis, clay mineralogy, or grain size analysis) and/or geochemistry (e.g., XRF scanning, heavy mineral geochemistry) is advantageous.
- Proficiency in laboratory work and data analysis.
- Good command of written and spoken English.
- Strong ability to work independently and in a team.
- Strong organizational skills.
- The working language in the Paleoclimatology Group is English. German language skills are beneficial but not required at the time of hiring.

- Valid driver's license (German Class B or equivalent).

Freie Universität Berlin promotes equal opportunities and diversity and particularly encourages applications from underrepresented minorities in science. Women with equivalent qualifications and academic achievements will receive preferential consideration.

Application Process:

Interested candidates should submit their application as a single PDF file via email to bewerbungpaleo@geo.fu-berlin.de until 27.01.2025. The application should include the following documents:

- Curriculum vitae (CV).
- Cover letter quoting the reference number UNINORD_2025.
- Copies of academic certificates (BSc and MSc).
- Contact details of two references.

Please note that interviews will be conducted online.

For further information, please contact Prof. Dr. Stefanie Kaboth-Bahr (stefanie.kaboth-bahr@fu-berlin.de / +493083850174).

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.