



UNIVERSITÄT
BAYREUTH

The **Bavarian Research Institute of Experimental Geochemistry and Geophysics** at the **University of Bayreuth** invites applications for a fixed-term position as

Doctoral Research Assistant in Experimental Geosciences (m/f/d)



The position can be filled for up to three years starting on 1 April 2026 or soon after this date. This is a part-time position (75%) with pay grade E13 (TV-L). The place of work for this position is at the University of Bayreuth in Bayreuth, Germany, EU.

The Bavarian Research Institute of Experimental Geochemistry and Geophysics (Bayerisches Geoinstitut, BGI; see <https://www.bgi.uni-bayreuth.de>) is a leading research institution in earth and planetary sciences using advanced experimental, analytical, and computational techniques. The Doctoral Research Assistant will complement the team of the project HYDROSPHEAR, which is funded by the European Research Council. This project will explore how H₂O may be stored in hydrous minerals of the lower mantle by constraining their stability limits and physical properties. More detailed information on the project may be found here: <https://geophormae.org/projects>.

We are looking for an excellent, highly motivated, and dependable researcher with an organised way of working and a proactive and creative approach to problem solving. We expect a respectful, collaborative, and supportive interaction with team members and staff, a profound interest in fundamental research, and a strong commitment to obtaining a doctoral degree. In return, the position offers access to an outstanding laboratory infrastructure for high-pressure experiments and material characterisation and excellent opportunities for starting a career in academia, for instance, by preparing a doctoral thesis and by attending dedicated training programmes.

Responsibilities of the Doctoral Research Assistant

Within the project HYDROSPHEAR, the Doctoral Research Assistant will have the following responsibilities and tasks:

- synthesise, characterise, and prepare samples for high-pressure experiments with diamond anvil cells (DACs)
- plan, prepare, and perform high-pressure experiments with DACs such as Brillouin spectroscopy and X-ray diffraction at the BGI and at synchrotron radiation facilities
- collect, analyse, and prepare experimental data for publication, presentation, and archiving
- publish results of high-pressure experiments in peer-reviewed scientific journals
- present results of high-pressure experiments at international conferences

The responsibilities of the Doctoral Research Assistant will include the following activities with aspects related to health and safety:

- working with lasers of classes 3 and 4
- working with X-rays
- working in laboratory environments
- working on night shifts (occasionally)
- travelling within and outside of Europe

Qualification criteria for the position as Doctoral Research Assistant

At the time of employment, the applicant must fulfil the following requirements:

- hold a university degree (MSc or equivalent) in Earth Sciences, Geosciences, Chemistry, Physics, or in a related field

- hold a valid work permit and visa for Germany/EU (if applicable)
- have a profound interest in fundamental and academic research
- have a strong motivation for carrying out experimental research
- possess very good communication skills in written and spoken English and/or German

In addition to the essential qualifications listed above, experience with and/or knowledge of any or several of the following may be considered beneficial:

- chemical and structural characterisation of geomaterials (X-ray diffraction, spectroscopy, electron microscopy, optical microscopy)
- high-pressure and/or high-temperature experiments
- operation of optical setups and instruments
- composition, mineralogy, and geophysical structure of the Earth's deep interior
- solid-state physics/chemistry and thermodynamics (equations of state, elasticity, thermodynamics of solids, chemical thermodynamics)

Application

To apply for this position, please submit the following documents (in English, as PDF files):

- Cover letter (<1 page)
- Curriculum vitae (<4 pages; do not include photograph or date or place of birth)
- List of publications and presentations at conferences/meetings (if applicable)
- Contact details of at least two referees
- Supporting statement explaining why you would like to contribute to the project and how this reflects your motivation to carry out doctoral research (<1000 words, excluding bibliography)
- Copies/translations of university certificates (in English or German)
- Transcript of records (if available, in English or German)
- English language certificate (if available)

All applications and related documents must be submitted through the [online application form](#) of the University of Bayreuth (code word '**HYDROSPHEAR-PreDoc**') by **28 February 2026**. Applications with documents that are incomplete, that are submitted by other means (e-mail, post, etc.), or that do otherwise not comply with the specifications outlined above will not be considered. Application documents will be deleted after the position has been filled in accordance with data protection requirements. Informal inquiries about the position and/or the application procedure may be directed to Johannes Buchen (johannes.buchen@uni-bayreuth.de).

About the University of Bayreuth

The University of Bayreuth values the diversity of its employees and is expressly committed to the goal of gender equality. Applicants with children are very welcome. The University of Bayreuth is a member of the Best Practice Club 'Familie in der Hochschule e.V.' (Family at the University) and has successfully participated in the HRK audit 'Internationalisation of Universities'. Applicants with severe disabilities will be given preferential consideration if equally qualified.

In addition to an attractive pay and contractual holiday leave, employees of the University of Bayreuth benefit from programmes for personal and professional development and training as well as from other benefits of public service such as the bicycle leasing programme JobRad, supplementary pension plans with the Federal and State Pension Institution, a range of health promotion offers, and the opportunity to participate in different sports activities as part of university sports programme.