

Postdoctoral Researcher (f_m_x) in Analytical Geochemistry by ICP-MS



The Helmholtz Centre Potsdam – GFZ German Research Centre for Geosciences is the national centre for geosphere research. As a member of the Helmholtz Association of German Research Centres (<https://www.helmholtz.de/en/>) we are part of the largest scientific organization in Germany. With approximately 1,400 (<https://www.gfz-potsdam.de/en/about-us/organisation/facts-and-figures/>) employees our key mission is to secure a profound understanding of the systems and processes of solid Earth, to develop strategies and options for action in addressing global change and its impacts on a regional level, to understand natural hazards and to minimize associated risks, to ensure the sustainable provision of energy and raw materials for a high-tech society and to evaluate the influence of human activity on system Earth.

As a partner in Geo.X (<https://www.geo-x.net/>), the GFZ has access to an excellent network of other geoscience institutions in Potsdam and Berlin. This largest regional concentration of geoscientific competence in Europe offers first-class cooperation and development opportunities.

In section 3.3 Earth Surface Geochemistry (department “Geochemistry”), we are looking for a:

Postdoctoral Researcher (f_m_x) in Analytical Geochemistry by ICP-MS

Reference Number 6982

We are seeking an experienced analytical (geo)chemical researcher with a special focus on mass spectrometry. In an interdisciplinary and diverse research group, led by Prof. Friedhelm von Blanckenburg, we develop and apply geochemical tools in Earth surface processes. The focus is on metal stable isotope fractionation in chemical weathering, cycling of elements through soil, plants, ground water, and river water. In the “HELGES Laboratory” (Helmholtz Laboratory for the Geochemistry of the Earth’s Surface) we measure metal stable and radiogenic isotope systems using a multicollector ICP-MS. We also employ an in-house built femtosecond-laser ablation system for in-situ isotope and elemental analyses. We determine elemental concentrations by several quadrupole ICP-MS systems, optical ICPs, and a high-resolution sector field ICP-MS.

Your responsibilities:

- Leading the day-to-day running of the mass spectrometers in the HELGES Laboratory
- Designing and conducting analytical routines for precise, ultra-low-blank metal isotope analysis using mainly multicollector ICP-MS, but also quadrupole/sector field ICP-MS for major and trace element analysis
- In situ analyses of solid samples using fs-laser ablation (MC-)ICP-MS (after a training period)
- Implementation of quality control measures, overseeing day-to-day maintenance and smooth operation of the instrumental HELGES laboratory (together with dedicated technical support staff)
- Supervising laboratory staff, graduate students, and external users
- Developing and conducting projects in the broad field of Earth Surface Geochemistry (e.g. water, soil, rocks, plants)

Your qualifications:

- Master`s degree or equivalent and Doctorate degree or PhD in Isotope Geochemistry, Analytical Chemistry, or related field.
- Experience in fully independent operation of multicollector ICP-MS for stable metal isotope ratio analysis
- Independent troubleshooting, repair and maintenance of multicollector ICP-MS instruments
- Method development for isotope analyses by MC-ICP-MS
- Experience in advanced analytical techniques, such as laser ablation analyses or isotope dilution
- A track-record of publishing methods and results in peer-reviewed journals
- Communicating and interacting in diverse, active communities; experience in supervision, management and mentoring is an advantage
- Fluency in spoken and written English; German is an advantage

What we offer:

- Ambitious and varied tasks in a dynamic and international research environment
- State-of-the-art equipment
- Public service benefits
- Extensive training opportunities
- Professional career advice offered by our in-house Career-Centre
- Flexible working hours and conditions
- Support with finding a good work-life balance offered by benefit@work
- Institute day-care centre on site
- Working at the Albert Einstein science park on the Telegrafenberg in Potsdam
- Work place within walking distance of Potsdam main train station, or just a short ride on the shuttle bus

Start date: As soon as possible

Fixed-term: 3 years

Salary: The position is classed as salary group 13 according to "TVöD Bund (Tarifgebiet Ost)". The salary group is determined on the basis of the Collective Wage Agreement and the respective personal qualifications.

Working hours: Full-time (currently 39 h/week)

Place of work: Potsdam

Have we piqued your interest?

If so, we look forward to receiving your application by **28th February 2023**. Please use our online application form only.

Diversity and equal opportunities are integral components of our human resources policy. The GFZ actively promotes diversity and explicitly welcomes applications from all qualified individuals, regardless of ethnic and social origin, nationality, gender, sexual orientation and identity, religion/belief, age and physical characteristics. Anyone who has been recognized as severely disabled, will be given preferential consideration in the event of equal suitability and qualification in accordance with the provisions of the German Social Code IX. If you have any questions, please contact our representative for the severely disabled at sbv[at]gfz-potsdam.de (mailto:sbv@gfz-potsdam.de), who will be happy to assist you in the further application process. In case of further queries regarding gender equality, please do not hesitate to contact our Equal Opportunities Officer at gba[at]gfz-potsdam.de (mailto:gba@gfz-potsdam.de).

Your personal data will be processed for the purpose of conducting the selection procedure on the basis of Art. 6 para. 1 b, Art. 88 GDPR in conjunction with Art. 26 of the Data Protection Act for the State of Brandenburg. After completion of the procedure, application documents will be deleted in compliance with data protection regulations.

In case of any further queries relating to the field of activity, please contact Dr. Patrick Frings either via email at patrick.frings@gfz-potsdam.de (mailto:patrick.frings@gfz-potsdam.de%20) or phone +49 (0)331-28828805. If you have any general questions about the application process, please contact our recruiting team at our phone number +49 (0) 331-6264-28787.