



**Research Associate (m/f/d)
in Geosciences and Microplastics Research
with the possibility of a doctorate**

DFG Emmy Noether Research Group

As part of the DFG-funded Emmy Noether project PLASTICAL, we are looking for a highly motivated and committed candidate (m/f/d) for a doctoral position in the geosciences, with a focus on plastic fragmentation and transport processes in sedimentary systems.

The PLASTICAL project is integrated into the Collaborative Research Centre (CRC) 1357 "Microplastics", involving around 140 researchers and offering excellent laboratory infrastructure as well as international networking and training opportunities.

Project Description

Plastic waste is ubiquitous in sedimentary systems and is transported, abraded and fragmented along with natural sediments. The resulting micro- and nanoplastics may have long-term ecotoxicological effects. However, the specific processes leading to fragmentation and abrasion in sedimentary environments are still poorly understood, as are their effects on transport and accumulation patterns.

In this project, you will investigate how plastics fragment and undergo abrasion during transport with sediments. This includes conducting laboratory experiments that simulate natural sediment transport processes. In addition, you will analyse samples from river systems to compare laboratory results with field data.

Your Tasks:

- Planning and conducting laboratory experiments on plastic fragmentation during transport with sediments, including the characterization of abrasion and fragmentation processes
- Performing experiments on microplastic transport in deep-marine systems using the Eurotank laboratories at Utrecht University (NL)
- Analysing sediment samples from deep-sea environments for microplastic content
- Participating in field campaigns in river systems for sampling and analysing fragmented plastic particles (in collaboration with project partners)
- Presenting research results at scientific conferences and project-related workshops

What We Offer:

- Interdisciplinary collaboration in a dynamic, research-intensive team addressing a societally relevant topic

- Access to an excellent scientific network and close integration into CRC 1357 “Microplastics” with diverse international exchange opportunities
- Funding and opportunities for research stays, as well as participation in workshops, conferences, and marine research expeditions
- Individual supervision and structured doctoral training through the Graduate School of the University of Bayreuth and the BayNAT doctoral programme Interdisciplinary Microplastics Sciences

Your Qualifications:

- Master’s or diploma degree in Geosciences, Physical Geography, or a related engineering discipline
- Interest or experience in sedimentology and sediment transport processes
- Ability to work independently in both laboratory and field settings
- Initiative, structured working style, and strong team spirit
- Proficiency in English is required for working in our international environment.

The position will be remunerated according to the Collective Agreement for the Public Service of the German Federal States (TV-L E13, 75%). The workplace is Bayreuth, and the position is to be filled on 1 January 2026. The contract is initially limited to three years.

The University of Bayreuth appreciates the diversity of its employees as an enrichment and is expressly committed to the goal of equal opportunities for all genders. Women are strongly encouraged to apply. Applicants (m/f/d) with children are very welcome. The University of Bayreuth is a member of the Best Practice Club "Familie in der Hochschule e.V.", and has successfully participated in the HRK audit "Internationalization of the University". Persons with severe disabilities will be given preferential consideration if equally qualified.

Your application

Please apply **online** with meaningful application documents stating the keyword **"PLASTICAL"** via our **application portal** of the University of Bayreuth. Applications will be considered on a rolling basis until the position is filled. The documents will be deleted after the position has been filled in accordance with the requirements of data protection.

If you have any questions, please contact: Dr. Florian Pohl

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