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The [University of Bayreuth](#) is a research-oriented university with internationally competitive, interdisciplinary focus areas in research and teaching. Within our interdisciplinary DFG-funded

[Collaborative Research Center 1357 Microplastics](#)

we invite applications for

3 PhD Positions (m/f/d)

The CRC Microplastics DFG-funded Collaborative Research Centres (CRC) are prestigious university-based research institutions, established for up to 12 years, in which researchers work together within a multidisciplinary research programme. The interdisciplinary CRC Microplastics bridges traditional disciplinary boundaries and brings together over 140 scientists from the fields of Biology, Chemistry, Polymer Science, Engineering, Mathematics, Physics and Earth Sciences. The goal of the CRC Microplastics is to gain a fundamental understanding of the processes and mechanisms that 1) condition biological effects of MP in limnetic and terrestrial ecosystems as a function of the physical and chemical properties of the particles, 2) influence the migration behavior of MP particles and 3) cause the formation of MP starting from macroscopic plastics. These findings provide a scientifically sound basis for assessing the environmental risks of MP, as well as for developing environmentally friendly plastics and processes to prevent the emission of MP into the environment. As a doctoral researcher within the CRC 1357 you profit from an interdisciplinary team, working on an application-oriented research field and you can contribute answering fundamental questions. All PhD students will receive an individual and interdisciplinary qualification through the [University of Bayreuth Graduate School](#) and the structured BayNAT - PhD Program [Interdisciplinary Microplastics Sciences](#), that will link all PhD candidates studying microplastics from all participating disciplines.

We offer two PhD positions in the CRC Microplastics as well as one associated PhD position **at the Chair of Animal Ecology** hold by Prof. Dr. Christian Laforsch, spokesperson of the CRC Microplastics:

PhD Position 1 The project A01 investigates which properties of microplastic particles determine the effects on limnetic model organisms compared to natural particulate material. A further focus is on the effects on biotic interactions such as predator-prey and parasite-host interactions as well as food web dynamics. Within the project, the PhD candidate will carry out laboratory and mesocosm studies and will apply state-of-the-art methods to study the effects from the molecular to the ecosystem level.

PhD Position 2 The project is associated to the project A01 and funded by the DBU. The aim of the project is to generate, select and test a set of well-defined natural reference particles for the risk assessment of particulate pollutants, such as microplastics in water and soil. The PhD candidate will further conduct ecotoxicological tests with a comprehensive set of test organisms from different environmental compartments (water, sediment, soil) to examine the suitability of reference particles. The candidate will be in intensive exchange with the project partners and related projects in the CRC.



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PhD Position 3 The project B06 investigates transport of microplastic particles in natural soils and on soil surfaces depending on their physical and chemical properties. The PhD candidate will conduct experiments on microplastic transport via bioturbation of different terrestrial model organisms. Next to in-situ visualization of MP transport via μ CT and microscopic techniques, the candidate will optimize the present methodological spectroscopic pipeline for particle-based microplastic identification in soil samples and expand it towards small microplastics.

The CRC microplastic comprises a multidisciplinary team of enthusiastic researchers in which all PhDs are embedded.

If you would like to be part of our team, you require an excellent master degree in biology, chemistry, or environmental sciences, depending on the position you are applying for. Experience in microplastics research is preferred but not mandatory.

If you

- enjoy working independently and in a structured manner as well as collaborating with an interdisciplinary team on a highly topical and socially relevant subject,
- show an above-average level of commitment, high flexibility, resilience and team-spirit,

you should submit your application by **28.01.2024**.

If the requirements are met, the salary is in accordance with the German Public Service salary scale (TV-L E13, 65%). Place of employment is Bayreuth. The position is to be filled as soon as possible and initially limited to a period of three years.

The University of Bayreuth values the diversity of its employees as an enrichment and explicitly commits to the goal of gender equality. Women are strongly encouraged to apply. Applicants with children are very welcome. The University of Bayreuth is a member of the Best Practice Club “Family at the University e.V.”; and has successfully participated in the HRK audit “Internationalization of the University”. Persons with severe disabilities will be given preference if equally qualified.

Please apply **online** with all relevant documents (CV, letter of motivation, certificates, etc.) indicating the keyword „**CRC 1357**“ via our [Application Portal Uni Bayreuth](#).

Note: Please indicate in your letter of motivation which project you are applying for (**A01, B06 or associated project**).

The documents will be deleted after the position is filled in accordance with data protection requirements.

If you have any questions, please contact Prof. Dr. Christian Laforsch or Dr. Martin Löder (sfbmicroplastic@uni-bayreuth.de).