





The University of Bayreuth is a research-oriented university with internationally competitive, interdisciplinary focus areas in research and teaching. The <u>Chair of Bioanalytical Sciences and Food</u> <u>Analysis</u> (Prof. Andreas Römpp) has of now a vacancy for a

PhD Position (m/f/d) 'Mass Spectrometry Imaging: Biological Effects of Microplastics'

in the framework of the Collaborative Research Centre (CRC) 1357 Microplastics. The part-time (65%) position is initially limited to three years and will be paid according to German public-sector level E13.

The CRC 1357 Microplastics:

The DFG-funded <u>Collaborative Research Center "Microplastics"</u> links the departments of Biology, Chemistry, Engineering, Mathematics, Physics and Earth Sciences at the University of Bayreuth. In its second funding period (2023-2026), the CRC 1357 investigates the biological effects of microplastics on various organisms, the transport of microplastics in and between air, water and soil, the formation and aging of microplastics, and new approaches to solutions in the field of environmentally friendly plastics. 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 <u>University of Bayreuth Graduate School</u> and the structured BayNAT - PhD Program <u>Interdisciplinary</u> <u>Microplastics Science</u>s, that will link all PhD candidates studying microplastics from all participating disciplines.

Your task:

The aim of project A03 is the "Characterization of molecular and histological effects of microplastics in tissues (sections) of aquatic and terrestrial model organisms". A combination of imaging analysis methods (FTIR, Raman, mass spectrometry) and classical histology will be used for this purpose. Your main task will be to further develop mass spectrometry imaging methods for model organisms and microplastics. This includes sample preparation, data acquisition parameters and data analysis approaches. By combining your results with complementary imaging techniques within project A03 and the CRC, molecular and histological effects in tissue can be directly linked to a single (identified) MP particle. This will provide new insights into the mechanisms of action of microplastics.

(You will be based in our laboratories on the main campus in Bayreuth.)

Your profile:

- a university degree (MSc, diploma or equivalent degree) in chemistry, biology, ecotoxicology, analytical sciences or a similar discipline
- a background in analytical methods, ideally mass spectrometry
- Experience in high-resolution mass spectrometry is a plus, but not explicitly required
- Programming skills (e.g. Python) are a benefit but not a requirement
- · Ability to work independently and in a structured manner
- Commitment, high flexibility, team spirit
- Very good knowledge of English (written and spoken)

We offer:

- a constructive and friendly working atmosphere in an open-minded and interdisciplinary team
- excellent scientific infrastructure and strong collaborations within the CRC 1357 Microplastics and internationally
- Doctorate in the structured doctoral program "Interdisciplinary Microplastics Science" with opportunities for further individual and interdisciplinary qualification
- flexible working hours, which allow the compatibility of family and career

The University of Bayreuth values the diversity of its employees as an enrichment and is expressly committed to the goal of equal opportunities for the sexes. Women are strongly encouraged to apply. Applicants 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.

Application

Please apply online with meaningful application documents (letter of motivation, CV and references) via our <u>Application Portal Uni Bayreuth</u>. Call identifier: **SFB1357-A03**

The documents will be deleted after filling the position according to the requirements of data protection.

For further information please contact: Prof. Andreas Römpp (E-Mail: <u>andreas.roempp@uni-bayreuth.de</u>)