3544 6149 PhD Student Biochemistry, Biology - Microplastics (m/f/d) We are recruiting a talented individual to join our team as a graduate student. Within the PhD project, we will explore the mechanism and application scope of enzymatic and photooxidative fragmentation of microplastic particles. Our laboratory lays the molecular foundation by biochemically producing and biophysically characterizing enzymes that mediate oxidative and radical-mediated polyolefin degradation. By investigating the degradation and fragmentation of polyolefins as a function of light, temperature, and solvent conditions, the project will provide unprecedented insight into degradation mechanisms and will thereby identify innovative strategies for prospectively removing microplastics from the environment. The thesis research is embedded within the collaborative research center 1357 ‘Microplastics’ recently renewed by the Deutsche Forschungsgemeinschaft. The highly collaborative project will be conducted in vibrant and close collaboration with polymer chemists, biochemists, biologists, and geoscientists. The successful applicant will conceptualize, plan, conduct, evaluate, document, present, and publish research into enzymatic and photooxidative mechanisms for polyolefin fragmentation and degradation. The applicant will further contribute to the supervision of B.Sc. and M.Sc. students. Upon completing the research, the applicant will write and defend a dissertation to acquire a PhD degree. Applicants should hold an excellent M.Sc. degree in Biochemistry, Biology, or a related discipline. Enthusiasm for experimental research, self-reliance, ability to work in an international team and good English skills are expected. Experience in one or several of the following subjects are desirable: molecular biology, protein biochemistry, enzyme mechanism, and biotechnology. We shall be delighted to provide more information on request. The Department of Biochemistry at the University of Bayreuth provides top-notch instrumentation for biochemistry, enzymology, and polymer science. By offering excellent training and research infrastructure, the institute and the university create a highly interdisciplinary and stimulating environment for biochemical projects. The position is available immediately for three years, and salary is according to the TV-L scale. biologist None 2023-03-07 15:57:49.215000