



December 19, 2022

PhD position in Forest Biogeochemistry

Deadwood as source of humus in forest ecosystems

We invite applications for a PhD position in an interdisciplinary DFG research project at the University of Bayreuth. The position is limited to three years and may begin in April or later in 2023. The salary is in accordance with the German Public Service salary scale (TV-L E13) with 65% of the regular working hours.

The project is part of a long-term and large-scale deadwood experiment (BELongDead) within the Biodiversity Exploratories (<https://www.biodiversity-exploratories.de>). In this experiment, functions and process rates of lying deadwood of 13 tree species have been studied at 30 forest sites in three regions in Germany for more than 14 years. This project focusses on the production and traits of humus from decomposing deadwood which is considered as potential source of carbon sequestration in forest ecosystems. It combines field observations, chemical and spectral analyses and microbial processes to assess the quality, stability and functions of tree species specific deadwood humus. Stable isotopes (^{13}C , ^{15}N , ^{18}O) will be applied to quantify microbial process rates including microbial growth, turnover, carbon use efficiency, respiration and nitrogen fixation. In cooperation with project partners, the relationship between chemical-microbial traits and microbial communities of deadwood humus is being investigated.

Qualifications

- Successfully completed Master's degree in geocology, soil science, biology, ecological microbiology, environmental sciences or similar
- Experience in lab and field work
- Experience in working with stable isotope techniques, wood chemistry, microbiology, statistical analyses is desirable
- Proficiency in English and very good writing skills

The doctoral researcher will benefit from interdisciplinary cooperation with the project partners from the consortium of the BELongDead experiment as well as the DFG Priority Programme 'Biodiversity-exploratories'. The University of Bayreuth is an equal opportunities employer and places particular emphasis on fostering career opportunities for women. Qualified women are therefore strongly encouraged to apply as they are underrepresented in this field. Disabled persons with equivalent aptitude will be favored.

Please send your application with documents (application letter, CV, copies of records of your BSc and MSc, documents showing research experience if applicable, references) in electronic form as a single pdf-file to Prof Dr. Werner Borke (werner.borke@uni-bayreuth.de). Review of applications will start on February 15, 2023, and will continue until the position is filled.