

Doctoral Researcher (ZALF)

Bewerbungsfrist: 01.03.2017

The *Leibniz Centre for Agricultural Landscape Research (ZALF) e.V.* - Institute of Landscape Biogeochemistry (LBG), Terrestrial Microbiology is seeking a **Doctoral Researcher (3 years)** Start 01.04.2017 [Reference N° 05-2017]

ZALF is a member of the Leibniz Association and, with its 350 employees, one of the largest research institutions in the Berlin-Brandenburg region. It is our mission to scientifically explain causal relationships in agricultural landscapes and to provide society with sound information for the sustainable use of agricultural landscapes through excellent research. ZALF strongly focusses on interdisciplinary collaboration. In the framework of the DFG-funded research platform “Biodiversity Exploratories” (Priority Programme 1374), a project is funded that addresses the relationship between biodiversity of microorganisms of the nitrogen cycle and the impact of land use in grasslands. An overlooked topic in plant nutrition and N dynamics of soils is the relevance of nitrate ammonification (DNRA) for N cycling and greenhouse gas emissions. In cooperation with the Institute of Microbiology (IfM) at the Leibniz University Hannover (LUH), the doctoral candidate will work in the research group Terrestrial Microbiology of the Institute of Landscape Biogeochemistry (LBG) and will deal with soil bacteria responsible for the formation of the greenhouse gas N₂O by denitrification and DNRA. Methods will reach from microbiological methods such as high throughput isolation and cultivation incl. MALDI-TOF MS, physiological tests, trace gas analytics, to genome sequencing and annotation. The goal of the project is to gain insights into the biodiversity and importance of soil DNRA bacteria compared to denitrifiers based on a large number of isolates and will assess the impact of land use intensity of grasslands on DNRA bacteria in soil.

Your tasks and responsibilities

- Project conduction (experiments, data editing, statistics)
- Preparation of publications
- Presentation of results on scientific conferences
- Interaction with scientists of groups Terrestrial Microbiology and Trace Gas Biogeochemistry, and of the IfM at the LUH

Your profile – we require

- Master of Science in microbiology, environmental microbiology, or related geosciences
- High motivation to take the next step in scientific career
- Very good knowledge of written and spoken English

We expect experiences in classical methods of microbiology such as isolation, cultivation and physiological characterization of microorganisms and if possible experiences in genome sequencing and annotation, excellent communication and teamwork skills, the motivation and capability to independently find solutions for complex tasks, an organized, independent working style, as well as the willingness to travel and to conduct field work. **We offer** individual options for courses and trainings to support your career development as well as a dynamic and international work environment and a participation in international conferences and scientific meeting. Working place is Müncheberg (near Berlin, Germany). The position is termed for 3 years (salary according to TV-L E13, 65%). It is possible to reach a doctoral degree (Dr. agr.; PhD) at the faculty for Life Sciences at the Humboldt University Berlin. Women are specifically encouraged to apply. Applications of mentally and physically challenged applicants will be favoured if they are equally qualified. **For further information contact:** Dr. habil. S. Kolb, Tel +49(0)33432/82-326, kolb@zalf.de. The LBG team comprises broad scientific and technical competences and you can contribute and develop further in close contact with experienced scientists. Are you interested in this position within an interdisciplinary and creative work environment? If yes, please send your application including a letter of motivation, CV (incl. list of publications), master and further certificates **until 01.03.2017** only as a single pdf by stating the **reference number 05-2017** to: Bewerbungen@zalf.de, Leibniz Centre for Agricultural Landscape Research (ZALF) e. V., Frau Hamann, Head of Human Resources Dept., Eberswalder Str. 84, D-15374 Müncheberg, Germany