Master Thesis Project (Masterarbeit) "Methanogenesis in Soil Ecosystems" (f/m/d)

Leibniz Centre for Agricultural Landscape Research (ZALF, Germany)

Are you interested in sustainable agriculture, microbial ecology, and greenhouse gas research? The Microbial Biogeochemistry (MicGeo) group at the Leibniz Centre for Agricultural Landscape Research (ZALF) offers exciting opportunities for master theses.

MicGeo focuses on understanding microbial functions relevant to sustainable agriculture, including soil carbon storage, and greenhouse gas emissions. Our work integrates field observations, experiments, and advanced environmental metaomics (e.g., metabarcoding, metagenomics, metatranscriptomics). As part of ZALF, a leading research institute in sustainable agriculture, we are engaged in international collaborations and cutting-edge research networks.

We offer thesis topics linked to our ongoing research initiatives, including the MetGrass and WetNetBB projects. These projects aim to develop a mechanistic understanding of how land-use factors influence greenhouse gas emissions, with a particular focus on methane dynamics in wetlands and grasslands.

Your tasks:

- Literature research
- Collection of soil & water samples from grassland and wetland ecosystems.
- Assistance with experimental work (optional).
- Evaluation & processing of the analysis results
- All work steps are accompanied by experienced scientists in MicGeo working group, laboratory work will be conducted at ZALF (Müncheberg).

Your qualifications:

- A background in microbiology, microbial ecology, environmental sciences, soil science, agricultural science or similar discipline. Experience in laboratory work is desirable.
- Command in English
- Commitment to travel and to contribute to sampling campaigns

We offer:

- A collegial and open-minded working atmosphere in a dynamic research institution.
- Work within a dynamic, international team and gain hands-on experience in cutting-edge research methodologies.
- Robust supervision for the entire duration of the thesis.
- Opportunities to learn molecular laboratory methods, such as nucleic acid extraction, PCR, qPCR.

Women are particularly encouraged to apply. Applications from severely disabled persons with equal qualifications are favored. Please send your application online. Please apply ONLY by e-mail, create a PDF document (one PDF file, max. 5 MB, packed PDF documents, archive files like zip, rar etc. Word documents cannot be processed and therefore cannot be considered!) with the usual documents, in particular CV, proof of qualification and certificates.

If you have any questions, please do not hesitate to contact us:

Prof. Dr. Steffen Kolb, (<u>Kolb@zalf.de</u>) principal investigator in the MetGrass and WetNetBB projects at ZALF, Head of WG Microbial biogeochemistry (ZALF) or **Dr. Milos Bielcik**, (<u>milos.bielcik@zalf.de</u>), coordinator of the WetNetBB project at ZALF.

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