Student Assistant in Soil Microbial Ecology

The Department of Environmental Science at Aarhus University, Roskilde, Denmark, welcomes applications for a student assistant position in soil microbial ecology with a focus on the effects of biochar on soil microorganisms in Danish agricultural soil.

Application Deadline:
24 June 2026

Institute/Faculty:
Department of Environmental Science

Faculty:
Faculty of Technical Sciences

Academic contact person:
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Vacant positions:
1

Number of months:
12

Hours per week:
15

Expected date of accession:
01/09/2026

Expected start date and duration of employment
This is a 1–year position from 1 September 2026, or as soon as possible thereafter.

Job description
This opportunity is positioned in projects studying the effects of biochar in the soil environment, specifically on the soil microbiome and interactions with other members of the soil food web. The projects are a collaboration across different biological and agronomic disciplines at Aarhus University. Crucial long-term field and shorter-term laboratory studies will investigate the potential and issues of biochar amendment to Danish agriculture on soil health and a healthy living microbiome. Central to this role is investigating the effects on biochar of different feedstocks and in different concentrations on the soil microbiome. This will include the study of interactions between biochar and biofilm forming microorganisms, interactions among microbes, invertebrates, and plant roots.

Additionally, this position aims to deepen our understanding of biofilm formation on biochar particles with possible biochar-degrading/modifying microorganisms and the functional and genetic activity of the microorganisms.

- The selected candidate will take on several duties, including collecting soil from field sites across Denmark alongside fellow scientists and field station personnel.
- Participate in field as well as lab-experiments under supervision.
- Moreover, a spirit of collaboration is vital, as the selected student assistant will be an integral part of our research team of soil and biochar projects.

This position is closely linked to the Danish Biochar Long-Term Experiment (Danish Biochar LTE). You will have the possibility of combining your bachelor's or master's thesis project with the position.

Your profile
The ideal applicant should possess knowledge of soil microbial ecology including interactions among soil microorganisms and other soil food web members, and an understanding and interest of climate change mitigation actions in agriculture.

On the technical side, the ideal candidate will gain knowledge in the use of molecular nucleotide analyses based on eDNA and eRNA; functional activity analyses like enzymatic or respiratory analyses, and with isolating and culturing microorganisms from soil and biofilms.

Qualifications requirements (academic and personal)
The ideal applicant should:

- Be actively studying in a relevant university program related to environmental microbiology, agronomy, environmental science, or molecular biology
- Know about the areas of soil environmental molecular microbial ecology and soil health
- Skilled in aseptic laboratory techniques isolating and culturing individual soil microorganisms
- Interested in bioinformatic and statistical analyse
- A readiness to carry out field research
- Interest in field and lab work
- Show flexibility of the weekly and daily working hours
- Have a valid driver's license

Who we are

The Department of Environmental Science is an interdisciplinary department under the Faculty of Science & Technology at Aarhus University. Our work spans fields from physics, chemistry, microbiology, molecular biology, and mathematical modeling to social science, geography, economics, and policy analysis. Both basic and applied research are conducted on some of the major challenges facing society, such as pollution and bioremediation, management of land, soil, water, air, and biodiversity, protection of ecosystem services, climate change, and energy systems. Science-based policy advice within these areas is offered to ministries and other stakeholders. Currently, about 160 staff and PhD-students are working at the department. Further information can be found at https://envs.au.dk/en/.

The Environmental Microbiology section conducts research and science-based policy advice targeted towards the understanding of the fate and role of microorganisms in ecosystems and interactions between bacteria, virus, fungi, protozoa, and microeukaryotes in glacial, terrestrial, aquatic, and atmospheric environments. Key areas covered by the section are:

- Microbiology in air, soil, ice, and rhizosphere
- Microbial and microeukaryotic genetics and diversity
- eDNA analysis and use in environmental monitoring
- Microbial and protist ecology
- Plant-microbe interactions
- Biodegradation of persistent organic pollutants
- Antibiotic resistance and pathogenicity
- Glacial Microbiology

We speak English on a daily basis in the department.

What we offer

The department offers:

- a well-developed research infrastructure, laboratories, and access to shared equipment
- an exciting interdisciplinary environment with many national, international, and industrial collaborators
- a research climate encouraging lively, open, and critical discussion within and across different fields of research
- a work environment with close working relationships, networking, and social activities
- a workplace characterised by professionalism, equality, and a healthy work-life balance.

Place of work and area of employment

The place of work will be at Aarhus University, Campus Risø, Frederiksborgvej 399, 4000 Roskilde, Denmark. The city of Roskilde is located 35 km from Copenhagen. The area provides immediate access to a wealth of cultural and recreational pursuits.

Contact information

For further information, please contact: Professor Anne Winding, +45 30254675, aw@envs.au.dk. Associate Professor Rumakanta Sapkota, rs@envs.au.dk.

Deadline

Applications must be received no later than 24 June 2026.

Formalities and salary range

Salary and terms as agreed between the Danish Ministry of Taxation and the Union of Commercial and Clerical Employees in Denmark/State (HK/Stat) for clerical staff, laboratory technicians and IT employees and the joint collective agreement concluded between the Danish Ministry of Taxation and the Organisations of Public Employees - Denmark - Danish State Sector (the OAO-S joint collective agreement).

Aarhus University's ambition is to be an attractive and inspiring workplace for all and to foster a culture in which each individual has opportunities to thrive, achieve and develop. We view equality and diversity as assets, and we welcome all applicants.

The application must be submitted via Aarhus University's recruitment system, which can be accessed under the job advertisement on Aarhus University's website.

Aarhus University

Aarhus University is an academically diverse and research-intensive university with a strong commitment to high-quality research and education and the development of society nationally and globally. The university offers an inspiring research and teaching environment to its 37,000 students (FTEs) and 8.700 employees and has an annual revenue of EUR 1.106 billion. Learn more at www.international.au.dk/