PhD scholarship within Forest Soil Ecology

About the position

The Department of Environmental Sciences and Natural Resource Management at the Norwegian University of Life Sciences (NMBU) has a vacant 3-year PhD candidate position related to forest soil ecology.

With this proposed PhD-project we aim to combine forest ecology and soil physics and hydrology to better understand the processes behind how tree growth responds to drought. We do this in an already existing system of field plots with pairs of spruce stands on mesic vs dry soils across a long latitudinal gradient in Norway. Here the aboveground responses are already being monitored, while the belowground processes remain unstudied.

The PhD-candidate will study how soil hydraulic properties affect tree-climate relationships and how these relate to nutrient cycling. In addition, the successful candidate will explore the role bryophytes and litter play in driving soil hydrology.

The applicant is made aware that an application for a PhD candidate position at NMBU is at the same time an application for admission to a PhD programme at the
institution. The documentation that is necessary to ensure that the admission requirements are met must be uploaded as an attachment.

**Main tasks**

The main activities for the PhD candidate will be related to the following tasks:

- Measure soil hydraulic properties and nutrient cycling. This includes both field and lab work
- Linking soil properties to tree response-measurements
- Analyse root traits
- Experimentally test how various properties of the bryophyte and litter layers influence soil hydraulic properties
- Analyse, write and disseminate results

The successful candidate is expected to enter a plan for the progress of the work towards a PhD degree during the first months of the appointment, with a view to completing a doctorate within the PhD scholarship period.

**Competence**

The successful applicant must meet the conditions defined for admission to a PhD programme at NMBU. The applicant must have an academically relevant education corresponding to a five-year master’s degree, with a learning outcome corresponding to the descriptions in the Norwegian Qualification Framework, second cycle. The applicant must have a documented strong academic background from previous studies and be able to document proficiency in both written and oral English. For more detailed information on the admission criteria please see the PhD Regulations and the relevant PhD programme description.

The applicant must document expertise and interest in the research subject.

**Required Academic qualifications**

- A relevant master’s degree in forest science, ecology, soil science or similar
The following experiences and skills will be emphasized:

- Experience with field- and laboratory work
- Documented experience with statistical analyses
- Motivation for the outlined research project

You need to have:

- Analytical skills
- Good social and collaboration skills and ability to work independently
- Strong motivation for the position
- Creativity and ability to find solutions to practical problems
- Driving license

**Remuneration and further information**

The position is placed in government pay scale position code 1017 PhD. Fellow. PhD. Fellows are normally placed in pay grade 54 (NOK 532,200, -) on the Norwegian Government salary scale upon employment and follow ordinary meriting regulations.

Employment is conducted according to national guidelines for University and Technical College PhD scholars.

For further information, please contact Professor Johan Asplund, E-mail: johan.asplund@nmbu.no; phone +47 6723 1654

Information for PhD applicants and general information to applicants

**Application**

To apply online for this vacancy, please click on the 'Apply for this job' button above. This will route you to the University's Web Recruitment System, where you
will need to register an account (if you have not already) and log in before completing the online application form.

Application deadline: 01.08.2023

In the application, the candidate must confirm that information and documentation (in the form of attachments) submitted via the job application can also be used by NMBU in a possible admission process.

Applicants invited for an interview are expected to present original diplomas and certificates.

The following documents must be attached to the application:

- Motivation letter (maximum 1 page)
- Complete CV
- Certified copies of academic diplomas and certificates. (i.e. Diploma, transcript. Diploma supplement for both bachelor and master). Diplomas, transcripts and diploma supplements that are not in Norwegian or English must be uploaded in the original language. An English translation of these documents must also be attached.
- Applicants from universities outside Norway are kindly requested to send a diploma supplement, or a similar document, which describes in detail the study program and grading system.
- Documentation of proficiency in written and oral English in accordance with NMBU PhD regulation section 5-2 (3).
- Names and contact details for two references
- Additional relevant documentation of professional knowledge (for example, list of scientific works). If it is difficult to judge the applicant’s contribution for publications with multiple authors, a short description of the applicant’s contribution must be included.
About The Faculty of Environmental Sciences and Natural Resource Management

The Faculty of Environmental Sciences and Natural Resource Management (MINA) works with nature and the environment, sustainable use of natural resources, biological and geological processes.

MINA’s employees undertake teaching, research and dissemination within the fields of geology, hydrology and limnology, soil science, environmental chemistry, forestry, ecology, natural resource management, renewable energy, and nature-based tourism.

Our vision is to be a key actor in knowledge production and dissemination, and our goal is to deliver research of high, international quality, and varied and excellent teaching. The faculty’s employees are significant participants within their respective fields of expertise, both nationally and internationally. The faculty is dominated by a vital research culture and high levels of scientific production.

The faculty has about 200 employees, 90 PhD students and 650 students.

Read more about MINA here.

The Norwegian University of Life Sciences (NMBU)

NMBU's focus is a joint effort for a sustainable future. Our university will contribute to securing the future of life, through outstanding research, education, communication and innovation.

NMBU has 1,900 employees of which about 500 phd scholarships and 6,700 students. The university is divided into seven faculties.
NMBU believes that a good working environment is characterised by diversity.

We encourage qualified candidates to apply regardless of gender, functional ability, cultural background or whether you have been outside the labour market for a period. If necessary, workplace adaptations will be made for persons with disabilities. More information about NMBU is available at [www.nmbu.no](http://www.nmbu.no).

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**Deadline**
1st August 2023

**Employer**
Norwegian University of Life Sciences (NMBU)

**Municipality**
Ås

**Scope**
Fulltime

**Duration**
Fixed Term

**Place of service**