



Global challenges regarding energy and climate change, the environment, health, food safety, technology and renewable solutions, use and conservation of land and natural resources, and development of the bio-economy, requires greater effort. NMBU is well equipped to conduct further research in these fields. NMBU's expertise spans entire value chains and includes both basic and applied research.

On 1 January 2014, the Norwegian School of Veterinary Science and the University of Life Sciences merged and became -NMBU, the Norwegian University of Life Sciences. NMBU has 1700 employees and 5200 students, and is currently located on two campuses - Ås, about 30 km south of Oslo, and Adamstuen in Oslo. In 2020, the new research- and education-building for veterinary science will be completed and all of NMBU will then be located at Campus Ås.

Further information about NMBU is available on www.nmbu.no

PhD fellowship - Multifunctionality of vegetated infiltration systems - Ref.no 18/01305

The School of Landscape Architecture, Faculty of Landscape and Society at the Norwegian University of Life Sciences (NMBU) has a vacant 3-year PhD-position related to plant sciences. The selected candidate is expected to start the doctoral studies in September 2018.

The Faculty of Landscape and Society has 1300 students and 180 staff. It consists of five sub-units, carrying out research and education in the fields of urban and regional planning, property management and law, landscape architecture, international environment and development studies, and public health.

The faculty offers two PhD programmes:

- Society, Development and Planning
- International Environment and Development Studies

About the PhD programme and the department

The School of Landscape Architecture has 45 staff, 8 PhD students and 300 students. Established in 1919, the School was the first landscape architecture programme at an academic level in Europe. It is the main academic institution of education and research in landscape architecture in Norway.

The school's activity is organised in six research groups; Landscape design and construction, Urban Green Space Management, Landscape Theory and History, Landscape and Community Planning, Environmental Horticulture and 3D visualization. The School hosts Centre for Landscape Democracy (CLaD), has a Plant nursing school, a scientific archive of landscape architecture history, a Virtual Reality laboratory and is currently establishing a Landscape Laboratory at the university.

The research theme of the PhD programme in Society, Development and Planning encompasses key challenges to society in the fields of urban and regional planning, real estate and law, public health science and landscape architecture, each of which constitutes one of the four subject areas of the programme. The PhD programme has ca 30 PhD candidates.

For further information regarding thematic areas and ongoing research programmes at the faculty, please visit: <https://www.nmbu.no/en/faculty/landsam>.

Research project

Multifunctionality of vegetated infiltration systems

The project aims to identify native drought/flooding resistance vegetation that could survive and thrive under urban conditions in northern climate. Specific objectives: 1) To develop criteria for selection (physiologically, aesthetically and functionally) of robust native plants suitable for stormwater retention systems. 2) To develop systems and solutions for robust plantings based on native material.

Research questions will be addressed using experiments under controlled and semi-controlled conditions combined with field and mesocosm experiments where we quantify the response of the entire plant-soil-water system while manipulating water contents (flooding, drought), temperature conditions above and below the ground (freeze/thaw). Plant performance will be investigated with instrumentation and sampling to understand responses at a range of organisational and temporal scales; from physiological responses like stomatal conductance, chlorophyll fluorescence, chlorophyll/n-content and frost tolerance to whole plant responses and interactions between species.

Main tasks

The PhD programme consists of mandatory and elective courses with oral and written examinations and a major research component. 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.

Academic qualifications

The applicant must have an academically relevant education corresponding to a five-year Norwegian degree programme, where 120 credits are at master's degree level. 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

Master's degree in plant sciences, plant physiology, plant ecology or related topics. Knowledge of Northern European nature types and Northern European plant species. Basic knowledge of experimental design and statistical analysis and interest in applied research. We are looking for a candidate with a broad scientific potential.

Desired Academic qualifications

- Any Scandinavian language is desirable but not required
- Experience with research and publishing
- Experience with experiments and instrumentation

Personal skills

Required personal skills

- Structured
- Independent and responsive
- Motivated to manage a research project
- Enjoy interdisciplinary and collaborative work

NMBU offers:

- An optimistic academic institution with focus on professional development, dissemination and competence.
- An interdisciplinary and inclusive environment that provides exciting research- and development opportunities.
- Daily contact with inspiring students and skilled colleagues.
- Various welfare schemes.
- Beautiful surroundings just outside Oslo.
- Participation in an active research group.
- Possibility of a place in a private kindergarten

Remuneration

Employment as PhD candidate follows national guidelines. The selected candidate will be appointed as a doctoral research candidate for a period of three years. The salary starts at level 51 (NOK 443 900 per annum) and follows ordinary meriting regulations. The total additional funding available for running expenses for the PhD studies is NOK 96 000 NOK.

Further information

For further information, please contact Associate Professor Line Rosef

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Application

To apply 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.

Applications should include (electronically) a letter of motivation to participate in this research project, curriculum vitae, full publication list, copies of degree certificates and transcripts of academic records (all certified), and a list of two persons who may act as references (with phone numbers and e-mail addresses). Publications should be included electronically within the application deadline. We may require further documentation, e.g. proof of English proficiency.

The shortlisted applicants will be called for an interview as a part of the evaluation. Applicants invited for an interview are expected to present original diplomas and certificates.

Applicants without a master degree and/or with incomplete applications will be excluded from the appointment process.

Application deadline: 9 April 2018

A compulsory contribution of 2 % is made to the Norwegian Public Service Pension Fund. A good working environment is characterized by diversity. We encourage qualified candidates to apply, irrespective of gender, physical ability or cultural background. The workplace will, if necessary be facilitated for persons with disabilities.

According to the Freedom of Information Act § 25 the list of applicants for this position may be made public irrespective of whether the applicant has requested that his/her name be withheld.

Jobbnorge ID: 148994, Deadline: Closed