PhD student in wetland hydrology

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Uppsala University is a comprehensive research-intensive university with a strong international standing. Our ultimate goal is to conduct education and research of the highest quality and relevance to make a long-term difference in society. Our most important assets are all the individuals whose curiosity and dedication make Uppsala University one of Sweden’s most exciting workplaces. Uppsala University has over 54,000 students, more than 7,500 employees and a turnover of around SEK 8 billion.

The Department of Earth Sciences at Uppsala University is Sweden's largest and most versatile department of its kind with approximately 250 employees. Our activities are interdisciplinary and combine natural science and technology with social science. We have research programs in air, water and landscape science (LUVAL); geophysics; natural resources and sustainable development; mineralogy, petrology and tectonics; paleobiology, and wind energy. By investigating the history of Earth, we understand how our planet has developed over time and how sustainable development benefits from this knowledge.

The successful candidate will be enrolled in the LUVAL program, which encompasses education and research in meteorology, hydrology, environmental analysis, and physical geography.

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Duties
Restoration of drained wetlands is a global goal because of its many benefits for society, among them enhanced biodiversity, carbon sequestration and water security.
However, there is limited knowledge on how restoration affects the hydrological functioning of peatlands under varying spatiotemporal conditions.

We are looking for a PhD student who will examine the effects of peatland rewetting and plant composition on hydrological functioning peat properties and micro climate by collecting field data and combining it with lab analysis as well as advanced modelling approaches. The position is part of an international research project funded by the Swedish Research Council for Sustainable Development, and the PhD candidate will be working closely with ecologists and remote sensing researchers in an international team.

PhD student duties include field, laboratory, and modeling-based research, as well as statistical analyses and writing scientific articles. The student will be working in a team and is expected to contribute to the overall progress of the project. The PhD training comprises four years of full-time study including courses and literature studies. The candidate will also have the opportunity to engage in teaching/supervising and other duties at the department, which may extend the position up to a maximum of 20%.

Requirements
To meet the entry requirements for doctoral studies, you must

- hold a Master’s (second-cycle) degree in Environmental Sciences, Hydrology, Environmental Engineering, Geoscience or other relevant subjects, or
- have completed at least 240 credits in higher education, with at least 60 credits at Master’s level including an independent project worth at least 15 credits, or
- have acquired substantially equivalent knowledge in some other way.

Applicants must fulfill the above requirements before the admission can be started. You must have good skills in oral and written English. Strong fieldwork, data processing and numerical skills are a prerequisite. The candidate also needs to possess a valid EU class B driver’s license at the start of fieldwork.

Additional qualifications
Prior experience with hydrological modelling, GIS, fieldwork, wetland hydro-biogeochemistry and coding (e.g., Matlab, R) are highly advantageous. Evidence of
analytical and collaborative skills, creativity, initiative and independence will also be considered in the ranking of candidates.

Rules governing PhD students are set out in the Higher Education Ordinance chapter 5, §§ 1-7 and in Uppsala University's rules and guidelines.

The application should be written in English and should contain:

1. A 1-page a letter of intent describing yourself, your research interests, what motivates you to apply for this position, and the desired starting date.
3. A verified list of course grades, and a short description of your education.
4. A copy of your master degree certificate.
5. Your degree project/thesis report (finished or in draft form).
6. The names and full contact information of two references (including e-mail address and phone no.)

About the employment
The employment is a temporary position according to the Higher Education Ordinance chapter 5 § 7. Scope of employment 100%. Starting date 01-06-2023 or as agreed. Placement: Uppsala

For further information about the position, please contact: Thomas Grabs, thomas.grabs@geo.uu.se

Please submit your application by 17 April 2023, UFV-PA 2022/993.

Are you considering moving to Sweden to work at Uppsala University? Find out more about what it’s like to work and live in Sweden.

Please do not send offers of recruitment or advertising services.

Submit your application through Uppsala University's recruitment system.
Placement: Department of Earth Sciences
Type of employment: Full time, Temporary position
Pay: Fixed salary
Number of positions: 1
Working hours: 100%
Town: Uppsala
County: Uppsala län
Country: Sweden
Union representative: ST/TCO tco@fackorg.uu.se
Seko Universitetsklubben seko@uadm.uu.se
Saco-rådet saco@uadm.uu.se
Number of reference: UFV-PA 2023/993
Last application date: 2023-04-17

Apply for position