

PhD student in Physical Geography in the area: ecohydrology of agroecosystems

at the [Department of Physical Geography](#). Closing date: 15 February 2017.

The Department of Physical Geography is one of the major departments within the Faculty of Science. The department has approximately 135 employees and educates approximately 2 000 students annually. Education is oriented towards geography, geosciences, biology-earth sciences, and environmental protection and environmental management. The main research areas are: Biogeography and Geomatics, Climate science and quaternary geology, Environment, resource dynamics and management, Geomorphology and glaciology, and Hydrology, Water resources and permafrost.

Project description

The position will be associated with the project “Quantifying the trade-offs between ecosystem service provision and water management in rice systems”

Rice consumes more water than any other crop, potentially leading to unsustainable water withdrawals. Alternate wetting and drying (AWD) has thus been advocated instead of continuous flooding. However, AWD does not guarantee high yields and promotes decomposition of soil organic carbon (SOC) and loss of nutrients, reducing fertility. With this project, we will investigate this trade-off between water savings, rice productivity and provision of ecosystem services (ES), focusing on three countries that span a range of growing conditions: Tanzania, Vietnam, and Italy. Soil analyses at our sites and global meta-analyses in combination with process-based models will allow for estimating the value of ES in rice systems, raise awareness of the intimate connections between rice and its soil, and suggest more sustainable practices and climate change adaptation measures.

Qualification requirements

In order to meet *the general entry requirements*, the applicant must have completed a second-cycle degree, completed courses equivalent to at least 240 higher education credits, of which 60 credits must be in the second cycle, or have otherwise acquired equivalent knowledge in Sweden or elsewhere.

In order to meet *the specific entry requirements*, and to fulfil the general syllabus for doctoral studies in the field of physical geography, the candidate for this position should have acquired a total of 240 higher education credits (of which at least 60 at advanced level), or acquired in some alternative fashion, the equivalent knowledge in engineering science, geoscience or environmental science.

Only a person who will be or has already been admitted to a third-cycle programme may be appointed to a doctoral studentship. The primary assessment criteria in appointing a doctoral student should be the capacity to benefit from the training.

Selection

The selection among the eligible candidates will be based on their capacity to benefit from the training. The following criteria will be used to assess this capacity: the candidates’ documented knowledge in a relevant field of research, written and oral proficiency in English, the capacity for analytical thinking, the ability to collaborate, as well as creativity, initiative, and independence. The assessment will be based on previous experience and grades, the quality of the degree project, references, relevant experience, interviews, and the candidate’s written motivation for seeking the position.

The candidate should have specific experience in hydrology, soil science, biogeochemistry, or ecology, and working knowledge of Matlab or other programming languages for data analysis and implementation of process-based models. Experience in soil sampling and analyses of soil properties is a merit. The candidate is expected to lead experimental

activities both in the field (including extended periods abroad) and in the lab with project collaborators, and to be engaged in outreach activities in the focus countries.

Admission Regulations for Doctoral Studies at Stockholm University are available at: www.regelboken.su.se.

Terms of employment

The term of the initial contract may not exceed one year. The employment may be extended for a maximum of two years at a time. However, the total period of employment may not exceed the equivalent of four years of full-time study.

Doctoral students should primarily devote themselves to their own education, but may engage in teaching, research, and administration corresponding to a maximum of 20 % of a full-time position.

Please note that admission decisions cannot be appealed.

Stockholm University strives to be a workplace free from discrimination and with equal opportunities for all.

Contact

For more information, please contact senior lecturer Stefano Manzoni, telephone: +46 764 960 952, stefano.manzoni@natgeo.su.se.

Union representatives

Anqi Lindblom-Ahlm (Saco-S) and Lisbeth Häggberg (Fackförbundet ST and Lärarförbundet), telephone: +46 8 16 20 00 (operator), seko@seko.su.se (SEKO), and PhD student representative: fredrik.c.l@sus.su.se.

Application

Apply for the position at Stockholm University's recruitment system by clicking the "Apply" button. It is the responsibility of the applicant to ensure that the application is complete in accordance with the instructions in the job advertisement, and that it is submitted before the deadline.

Please include the following information with your application

- Your contact details and personal data
- Your highest degree
- Your language skills
- Contact details for 2–3 references

and, in addition, please include the following documents

- Cover letter
- CV – degrees and other completed courses, work experience and a list of degree projects/theses
- Research proposal (no more than 3 pages) describing:
 - why you are interested in the field/project described in the advertisement
 - why and how you wish to complete the project
 - what makes you suitable for the project in question
- Degree certificates and grades confirming that you meet the general and specific entry requirements (no more than 6 files)
- Letters of recommendation (no more than 3 files)
- Degree projects/theses (no more than 3 files).

The instructions for applicants are available at: [Instructions – Applicants](#).

You are welcome to apply!

