

2018-01-15

## **The Department of Environmental Science and Analytical Chemistry**

### **PhD student position focusing on Carbon-Cryosphere-Climate Interactions in the Arctic Land-Sea System**

**Ref.nr: SU FV-0022-18.**

**Deadline for applications: 1 March 2018**

Our department has >200 employees of which 60 are PhD students, from many different countries. We are well integrated in the interdepartmental Bolin Centre for Climate Research.

#### **Project description**

Permafrost on land, along the coastline and in the subsea sediments holds large quantities of frozen carbon, which may be remobilized due to climate warming and eventually be released to the atmosphere as greenhouse gases. A key region for this is the East Siberian Arctic Ocean. The PhD project will be immersed in a decade-long ongoing international research collaboration on climate-relevant biogeochemical carbon cycling processes in the Arctic. The objective of the project is to increase the understanding of carbon and/or methane sources, transport/degradation processes; key aspect of these permafrost carbon-climate links.

The project offers involvement in studies of both the contemporary carbon/methane systems as well as during earlier warming periods and the makeup of subsea permafrost through studies of sediment cores; opportunities for collaborative field work. Our research group has extensive experience of biomarker and compound-specific isotope analysis of organic molecules and gases in air, water and sediments. Experiences with chemical/geoscientific analyses, handling of instruments and field sampling are all beneficial but not a requirement.

Collaborative skills as well as proficiency in scientific writing are highly desirable. Our research in this area is financed by the Swedish Research Council (VR), a EU-H2020 Project and the European Research Council (ERC) through an Advanced Grant.

#### **Qualification requirements**

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, for doctoral studies in Environmental Science, at least 45 of the credits at the second cycle must be in one of the natural sciences (Biology, Chemistry, Earth Sciences, Physics, or Meteorology) including a 30 hp/HEC thesis project. The applicant should also have 30 hp/HEC in other natural science subjects different from the major. Only a person who will be or has already been admitted to a third-



cycle program 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 ability to successfully pursue the research education. Special emphasis is put on the applicant's knowledge and skills within the subject area, ability to express her/himself verbally and in writing, analytical aptitude, creativity, initiative and independence, and a capacity for working together with others. The evaluation will be made based on the relevance of past education and experience, grades from previous university courses (in particular at the advanced level), the quality and ambition of the independent project work, references, a cover letter motivating the candidate's interest, and interviews.

Admission Regulations for Doctoral Studies at Stockholm University are available at: <http://www.su.se/rules/book-2/education-at-phd-level-research/admission-regulations-for-doctoral-studies-at-stockholm-university-1.270190>. (visa text: [www.su.se/rules](http://www.su.se/rules))

## 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 Professor Örjan Gustafsson, [orjan.gustafsson@aces.su.se](mailto:orjan.gustafsson@aces.su.se).

Information about PhD education in Sweden can be found in *The Handbook for Postgraduate Students*: [www.doktorandhandboken.nu/english](http://www.doktorandhandboken.nu/english)

## Union representatives

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

## Application

Apply for the position at Stockholm University's recruitment system <http://www.su.se/english/about/working-at-su/phd> 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 motivating your interest for this position
- CV – degrees and other completed courses, work experience, and a list of degree projects/theses
- 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](#).**

**To apply for this position you need to use Stockholm University's web based application form. You will find the link to the web application form in the advertisement at:**

<http://www.su.se/english/about/working-at-su/phd>