PhD student in Applied Environmental Science focusing on Atmospheric Science

Ref. No. SU FV-0962-17

at the Department of Environmental Science and Analytical Chemistry.

Closing date: 2 May, 2017.

The Department of Environmental Science and Analytical Chemistry (ACES) has about 220 employees of which about 60 PhD students. Research study programs are offered in applied environmental science, analytical chemistry and environmental chemistry and courses are given in environmental science and analytical chemistry.

Project description
The Arctic climate is changing dramatically, faster than anywhere else on Earth. The underlying processes of the observed changes are not fully understood, yet they propagate through the entire global climate system with impacts on weather, ecosystems and geopolitics. Clouds and aerosol particles, which act as cloud condensation nuclei (CCN) or ice nuclei (IN), play a major role in that system and are among the main contributors to the overall uncertainties.

This PhD project will help to provide an improved understanding of the key processes governing the life cycle of Arctic clouds, necessary to quantify the role of clouds for Arctic climate and their response to warming. The successful applicant will perform field experiments in the Arctic, analyse existing long-term data and perform laboratory experiments required prior to the field deployment. The specific goal of the project is to study the microphysical properties of CCN and IN for by experimentally determining their size, composition and physico-chemical properties coupled with process modelling. The results will be used to improve the description of Arctic clouds in larger scale models such as Earth System models.

This PhD project is part of the "Arctic Climate across Scales (ACAS)" project, a collaboration between the Department of Environmental Science and Analytical Chemistry (ACES) and the Department of Meteorology (MISU), and is funded by the Knut and Alice Wallenberg Foundation.

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 Applied Environmental Science, at least 45 of the credits at the second cycle must be in one of the natural sciences (Physics, Chemistry, Earth Sciences, Biology, 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 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 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.

Interest in experimental atmospheric research are essential for this PhD project, as well as basic knowledge of data analysis and programming tools. Prior experience in these methodologies will be advantageous for the position. Proficiency in both written and spoken English as well as good collaboration skills are also necessary for succeeding in the project.

Admission Regulations for Doctoral Studies at Stockholm University are available at: 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 Asst. Prof. Paul Zieger, telephone +46 8 674 7634, paul.zieger@aces.su.se.

Further information about the position can also be obtained from Prof. Ilona Riipinen, telephone +46 73 5859251, ilona.riipinen@aces.su.se and Dr. Radovan Krejci, telephone +46 8 6747224, radovan.krejci@aces.su.se.

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

You are welcome to apply!

Stockholm University – our education and research produce results.

Closing date: 02/05/2017

URL to this pagehttp://www.su.se/english/about/vacancies/vacancies-new-list?rmpage=job&rmjob=3003&rmlang=UK