



## **PhD position in Chemical Oceanography - Air-sea gas exchange and the marine carbon cycle in Isfjorden, Svalbard**

### **General**

The Department of Arctic Geophysics (AGF) at the University Centre in Svalbard has a vacant PhD position for four years within chemical oceanography with a focus on air-sea gas exchange and the marine carbon cycle in Isfjorden, Svalbard.

### **About UNIS**

UNIS provides education and carries out scientific research based in Svalbard within the high Arctic, and benefits greatly from this geographical location. Approximately half of the staff and students are from abroad, and all teaching is in English. UNIS is located in a new building in Longyearbyen, Svalbard, with access to modern laboratories and equipment. UNIS is a state-owned limited company. For more information about Svalbard please see

'About Svalbard' at [www.svalbard.net](http://www.svalbard.net)

The Department of Arctic Geophysics constitutes 3 professors, 4 associate professors, 1 researcher, 1 post-doctoral research fellow, 4 PhD students and 9 Adjunct Professors (20% position). The ACSI (Air-Cryosphere-Sea Interaction) group within the department focuses on the air-cryosphere-sea interaction processes through observation and model experiments and the successful candidate will be an active member of this group. Additional information about the AGF department can be found at [www.unis.no](http://www.unis.no)

### **Description of the vacant position**

We seek a highly motivated and enthusiastic individual with strong academic ambitions that has the ability to work successfully within a team. The candidate will have an active part in fieldwork around Svalbard.

The main objective for this PhD project is to better understand CO<sub>2</sub> uptake and sequestration in Arctic coastal regions and to infer the role freshwater discharges and inflow of Atlantic Water to the fjords in West Spitsbergen have on this uptake and sequestration. Taking advantage of the closeness UNIS has to Isfjorden, the candidate will take an active part in a sampling program focusing on seasonal and interannual variability in the biogeochemical and freshwater cycles of Isfjorden. Both conventional and sensor technology will be used and the candidate will acquire knowledge on new technology especially using CO<sub>2</sub>, oxygen, and pH sensors.

We will recruit a PhD candidate with knowledge of the carbonate system and air-sea gas exchange. The PhD candidate is expected to take an active role in producing peer-review papers within these topics that eventually will lead to the final PhD dissertation. Some teaching and supervision of undergraduate and Master students can be expected.

### **Qualifications**

The successful candidate must have a Master degree or equivalent in chemical oceanography with a good understanding and experience in biogeochemical cycles. Field experience and skills in using scientific instruments for analyzing water samples (DIC, ALK, pH, O<sub>2</sub>) are an advantage. Good oral and written skills in English are important.

Admission to the doctoral programme at the Geophysical Institute, University of Bergen, is a condition of employment in the position as PhD student. The final plan for researcher

education shall be approved and a contract signed with the mainland university at the latest six months after commencement. The candidate and the supervisors will prepare the application.

### **Employment conditions for the PhD position**

The employment contract is of 4 years and includes mandatory duties of 25%.

The successful candidate must live in Longyearbyen. He/she is expected to contribute actively to ongoing scientific activities in the department. It is also expected that the PhD student take an active part in the advancement of his/her field of research, and he/she must also be willing to contribute to the development of UNIS in a more general sense.

### **Salary**

All salaries are set in accordance with the Norwegian government's University salary scale. Ph.D students starts at salary step 50, which currently is a gross salary of NOK 429 400.- As a resident in Svalbard an annual allowance of NOK 29 600.- (Svalbardtillegg) will be added to the salary. A Social Security contribution of 2 per cent, to the Norwegian Public Service Pension Fund, will be deducted from the salary. Income tax on Svalbard is 8 per cent, plus 8.2 per cent toward National Insurance coverage.

### **Selection and appointment**

An expert Committee appointed by the Managing director of UNIS will evaluate the qualifications of the applicants. The Committee will review the applications in detail and summarize their assessments in a written report. This report and the derived recommendations form the basis for interviews, which will be summarized by the expert committee. They report to the Appoichementment Committee and Director of UNIS, which makes the final appointment.

### **Application and further information**

A more complete description of the project and other inquiries about this position may be directed to: Eva Falck: Email: [eva.falck@unis.no](mailto:eva.falck@unis.no), or telephone: +47 79 02 33 53.

### **Deadline for application is 1st of August 2014.**

Please apply online by using our application form found at [www.unis.no/vacancies](http://www.unis.no/vacancies)

You can request to have your application kept from public access cf. the open files act § 25. The request must be explained. UNIS will determine if the application will be kept from public access or not, based on the explanation and the regulations from the open files act.

If the application will not be accepted, the candidate will be contacted.

In the end of the form, please attach copies of academic records and other documentation you find relevant for the application. The committee may ask for further documentation of the education record and scientific work described by the applicants.