

UNIS is a state-owned limited company with five of Norway's universities represented on the board. UNIS is located in a modern working environment in Longyearbyen, Svalbard, and is well equipped with both technical and scientific equipment and laboratories. The institution has an infrastructure for both marine and terrestrial field, lab and experimental research. The studies at UNIS are marketed internationally and all classes are offered in English. Approximately half of the staff and students are from abroad.

# Faculty position in Arctic Geophysics at the University Centre in Svalbard (UNIS)

# Full/Associate Professor in Boundary Layer Meteorology

#### General

The department of Arctic Geophysics is now seeking candidates for the position as Professor/Associate Professor in Boundary Layer Meteorology. Currently the department constitutes 3 professors, 4 associate professors, 2 researchers, 1 post-doctoral research fellow, 4 PhD students and 11 Adjunct Professors (20% position). The ACSI (Air-Cryosphere-Sea Interaction) group within the department focuses on the Air-Chryosphere-Sea interaction processes through observation and model experiments. In order to strengthen the ACSI research group and continue our strong research focus within atmospheric- and ocean boundary layers at the department of Arctic Geophysics we have opened a position in Boundary Layer Meteorology.

# **Description of the vacant position**

We are seeking an applicant with a PhD in meteorology or its equivalent, and a background in interaction studies in order to strengthen the air-cryosphere-sea interaction research within the Arctic Geophysics department. The Arctic is characterized by extremes in both weather and climate, and significant interactions between the atmosphere, ocean, sea ice, glaciers, and land ice take place in the region that affect the weather on a global scale. There is an urgent need to better understand the dynamical processes behind the variable heat transport to the Arctic in both the atmosphere and the ocean, and the impact this has on the snow- and ice masses in the Arctic. Furthermore, weather forecasts in the Arctic are often unreliable, and the global climate models show large uncertainty in future climate scenarios, especially in the Arctic. Reasons for these deficiencies include the general lack of observations in the area and the fact that several processes in the predominantly stable Arctic atmospheric boundary layer are poorly understood and often poorly implemented in these kinds of models.

The vacant position in Boundary Layer Meteorology will include research and teaching of the processes behind the turbulent exchange of heat, momentum and matter between the atmosphere and the ocean, sea ice, glaciers and tundra (all with and without snow cover) in the Arctic. The successful candidate will have a theoretical background within boundary layer dynamics and exchange processes with emphasis on the stable boundary layers: turbulence: air-cryosphere-sea interaction; topographically induced measuring techniques and data analysis. The research and teaching within the ACSI group is performed from an observational, modeling and climate-change point of view, with emphasis on observations and fieldwork. Moreover, the research will be conducted in close collaboration with the large-scale meteorologist in the ACSI group with an expertise within the connection between the larger and smaller (meso and synoptic) scale flow. The successful candidate will therefore have experience in both conducting fieldwork in Arctic conditions and preferably also with atmospheric boundary layer modeling, and be able to team up with physical- and chemical oceanographers and glaciologists."

The appointed person will conduct research within the scope and strategy of the Department of Arctic Geophysics at UNIS and is expected to participate in the supervision of master- and PhD students in cooperation with the Norwegian Universities. The teaching affiliated with this position includes two courses in meteorology linked to the department course strategy and the ACSI group research activity. One course at the bachelor level (AGF-213, Polar Meteorology and Climate) is offered each year, and the second course at the master- and PhD level (AGF-350/850, The Arctic Atmospheric Boundary Layer and Local Climate Processes), is offered every second year. The AGF courses are closely tied to the existing study programs at the Norwegian mainland Universities in accordance with the University collaboration agreement with UNIS. Please note that UNIS stresses the importance of field- and research based studies throughout our teaching programs at all levels. For further description see: <a href="http://www.unis.no/studies">http://www.unis.no/studies</a>.

UNIS as an academic institution, carries significant responsibilities in research and teaching, with a curriculum that includes training of Masters and Doctorate students.

#### **Qualifications**

Applicants for the position must be able to document their qualifications as Full or Associate Professor. To be considered for the position of Associate Professor a Ph.D. in meteorology, or its equivalent, is the minimum requirement. Professor qualifications must be documented as UNIS does not evaluate applicants for professorships. Furthermore, the applicants' background from previous work on Svalbard and other Arctic regions will be assessed as well as their pedagogic qualifications. Applicants are also requested to document their pedagogic qualifications and experience.

It is important that the person who is appointed has the ability to work independently, has a positive attitude and is flexible. A well-established international network is desirable in order to strengthen the internationalization of the teaching offered at UNIS.

#### **Employment conditions for faculty positions at UNIS**

The vacant position is fulltime, permanent within the Arctic Geophysics department.

Currently, sixty per cent of the working time of full-time faculty at UNIS is reserved for research and professional development. In addition, staff is required to be involved in teaching, administration and the social community. Approximately 30 ECTS are linked to each full-time position at UNIS. Full-time staffs have both the professional and the administrative responsibility for one or more subjects that are equivalent to 15 ECTS (primary subject). In addition they have a coordinating, administrative responsibility for a further 15 ECTS (secondary subject). External guest-lecturers augment the teaching in most courses to ensure complete and high-level instruction within each field of study.

All scientific staff is responsible for planning the content of their primary subject and must make all necessary arrangements with external guest lecturers, as well as preparing for and coordinating the stays of guest-lecturers coming to Svalbard. All faculty members are also responsible for budget compliance and financial follow-up for their primary subject and for providing continuity of contact with the students in their primary course. They must also provide assistance in handling these tasks in secondary courses assigned to them. The successful candidate is expected to take an active part in the advancement of his/her field of research and must also be willing to contribute to the development of UNIS in a more general sense.

#### UNIS will offer:

- Free arrival passage for you and your family, and relocation expenses associated with initiation of the engagement.
- Annual refund of expenses for trip related to vacation for you and your family.
- Membership in the Norwegian Public Pension Fund.
- Favorable conditions for sabbatical leave.

### Salary

All salaries are set in accordance with the Norwegian government's University salary scale. Full Professors are offered a gross salary within the scale of salary step 69 – 101, normally within 69 – 78 (NOK 601 400 – 733 000) in the University salary scale. Associate Professors are offered a gross salary within the scale of salary step 57 – 77, normally within 57 - 68 (NOK 482 500 – 590 000) in the University salary scale. In special cases a higher salary step can be considered. The salaries are depending on experience/seniority. As resident of Svalbard, an annual allowance of NOK 29 600 (Svalbardtillegg) will be added to staff salaries. 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**

The field of expertise of all applicants will be evaluated in relation to the existing plans and research profiles of the department (see our web pages at <a href="www.unis.no">www.unis.no</a>). A committee will evaluate the qualifications of the applicants. Based on the report, the top ranked person(s) will be invited for a trial lecture and an interview. The appointment will be made by the Board of UNIS, based on the recommendation from the evaluation committee, interview committee and the UNIS appointment committee. As UNIS would like to increase the percentage of females in academic positions, women are especially invited to apply.

## **Application**

Inquiries about this position may be directed to: Professor Frank Nilsen, phone: + 47 7902 3338, e-mail: frank.nilsen@unis.no

# Deadline for applications is 25.01.2014

Please apply online on www.unis.no - vacant positions

In the end of the form, please attach:

- a full list of publications & previously held grants
- education, pedagogic or teaching certificates (including a list of previously supervised graduate and PhD students, where applicable)
- 5 publications (authored or co-authored by the candidate) that he/she wants to have evaluated for consideration for appointment to this position

The committee may ask for further documentation of the scientific work described by the applicants.

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.