Jobbnorge ID: 278043
Deadline: 4/25/2025
Website: https://www.unis.no
Scope: Fulltime
Duration: Temporary

About UNIS

UNIS is the world's northernmost educational institution, located in Longyearbyen. UNIS has technical and scientific equipment, laboratories, and infrastructure for teaching and research in arctic natural sciences and technology related to the sea, land, and atmosphere.

The fields of study include Arctic biology, geophysics, geology, technology and safety. All teaching is conducted in English, and approximately half of the staff and students come from abroad. UNIS is a state-owned company, and the administrative language is Norwegian.

About the department

The department of Arctic Geophysics at UNIS is seeking candidates for a full time PhD position in the field of satellite remote sensing. Currently the department constitutes 5 professors, 3 associate professors, 2 researchers, 4 PhD students, 2 technicians and 8 Adjunct Professors (20% position). The research within the department is focused into two groups: sea-ice-snow-air processes and Space Physics. The Space Physics group operates a world-class optical auroral observatory, the Kjell Henriksen Observatory.

As part of our team, you will have the opportunity to experience the spectacular Svalbard with Longyearbyen as your workplace. Longyearbyen is a modern settlement with approximately 2,500
inhabitants, situated in wild and beautiful Arctic nature, offering great opportunities for outdoor activities, experiences, and a vibrant cultural life.

Ph.D. position in Arctic Geophysics (Satellite Remote Sensing)

About the position and project

The position is a full-time four-year PhD student position. The four-year contract includes a year of required duties. Alternatively, the candidate may choose a three-year position which excludes these duties. Applications are also open to this year's master's candidates, with the requirement that the master's degree must be completed by July 1st, 2025. The desired start date is during August, and no later than September 1st.

The PhD. position to be filled is titled "Assessing and improving the accuracy of cryosphere Essential Climate Variable (ECV) retrievals from European satellite missions"

The candidate will work towards closing the recognized knowledge gaps for the future European satellite earth observation missions. Core of the project is collecting reference data of cryosphere targets - snow, sea ice and glaciers - that can be used to better quantify the accuracy of current satellites such as CryoSat-2, SWOT and Sentinel-3A/B, as well as develop new algorithms for future missions such as CRISTAL and Sentinel-3 Next Generation. We foresee the candidate to concentrate on radar altimeter missions, but the project can be easily adapted to, for example, synthetic aperture radar missions such as Sentinel-1, HARMONY, ROSE-L and Sentinel-1 Next Generation. The candidate shall improve the measurements of the effects of climate change, allowing better forecasting and mitigation of, for example, the global sea level rise.

The backbone of the project is a series of field campaigns collecting in situ data under satellite overpasses. These measurements should fulfill the requirements of fiducial reference measurements. The candidate shall, supported by the supervisors and UNIS Operations and field support, contribute to the planning and execution of this fieldwork, as well as data analysis.

Qualifications

Required Qualifications

- Applicants must hold a master's degree in a field relevant for the position or the degree must be completed by July 1st, 2025
- Admission to the doctoral program at UiT The Arctic University of Norway is a condition for the employment
- Good knowledge of satellite measurements of snow and ice, good data analysis and programming skills and strong motivation in solving scientific puzzles
- Reasonably proficient in a programming language widely used in scientific work
- Must be able to work in a structured manner both independently and in a team
- Proficient in both written and oral English

Preferred knowledge and skills

- Previous experience in satellite remote sensing, in particular working with in-situ collected reference data
- Experience in living and working in polar and alpine regions is advantageous
- Experience in teaching
- Good problem-solving skills, and an overall positive and flexible attitude
- Driver’s license class B (valid for Svalbard)

Motivation and personal suitability will be emphasized

We offer

UNIS offers a challenging and varied job in an exciting, pleasant, and international environment. As an employee, you will be a member of the Norwegian Public Service Pension Fund (SPK), which provides one of the best pension schemes on the market. We also offer excellent insurance schemes, coverage of travel and relocation expenses upon starting the position, and staff housing in accordance with current regulations.

The position is classified under the job code “Stipendiat” (code 1017). In addition to the base salary, a Svalbard allowance of NOK 42,840 per annum is provided. A 2 % contribution to the Norwegian Public Service Pension Fund is deducted from the salary. The income tax rate in Svalbard is currently 8 %, and a national insurance contribution of 7.7 % is also deducted.

Spørsmål om stillingen

Inquiries about this position may be directed to:
Associate professor Eero Rinne, email: eeror@unis.no

Application deadline 25.04.2025

Please include the following documents to the online application form:

- Motivational letter (max. 1 page) to state applicants scientific and personal interest in pursuing a Ph.D on the announced topic and at UNIS
- Full academic CV
- Transcripts and diplomas showing the completion of bachelor’s and master’s degrees, alternatively an official confirmation that the master’s degree will be completed by 1st July, 2025
- Contact information for two references, one of which must be your master's supervisor

It is possible to request that your name/application be exempt from public disclosure in accordance with the Freedom of Information Act (Offentlighetsloven) § 25. The request must be justified. Please note that if the request is not granted, the applicant will be contacted and given the opportunity to withdraw the application.

Diversity, Equity and Inclusion
One of UNIS’ values is inclusion. We are committed to achieving diversity within the workforce and creating an inclusive working environment in the high Arctic. We therefore welcome applications from all qualified candidates irrespective of nationality, gender, sexual orientation, ethnicity, beliefs, age, or other characteristics. Applications from women are encouraged.

Selection and appointment
A committee appointed by the Managing director of UNIS will evaluate the qualifications of the applicants and invite the highest ranked person(s) for an interview. The appointment will be made by the Director of UNIS based on the recommendation from the committee.

Additional information

Contact person:

Eero Rinne, Associate Professor
Phone: | E-mail: eeror@unis.no

Place of service:

Pb. 156 9171 Longyearbyen (Svalbard Municipality)