Researcher in cryospheric remote sensing

Job description
A researcher position (SKO 1109) in cryospheric remote sensing is available at the Department of Geosciences, University of Oslo.

Expected start is from autumn 2021 on. The position is secured for 1 year and may be prolonged, subject to continued third party funding.

The position is connected to various projects, including projects with the European Space Agency ESA, such as the Glaciers_CCI project. The candidate will develop a range of remote sensing methods and apply them to glaciers, snow, permafrost, and related natural hazards. Working place is Oslo.

The position is part of a research group led by Andreas Kääb

More about the position
The candidate will develop remote sensing methods from large amounts of satellite altimetry data in combination with optical remote sensing or SAR interferometry data, and apply them to the cryosphere. Special focus of the position is on satellite laser altimetry, i.e. ICESat and ICESat-2 data processing and analysis. Primary tasks are the generation and analysis of surface elevation data and DEMs, and elevation differences thereof, over cryosphere components, in particular glaciers and snow. Applications include changes of glaciers, snow and permafrost in the light of climate change. The candidate will collaborate much on an international level and contribute to various projects within the research group. The candidate is expected to frequently publish results in reports and in leading international journals.

Qualification requirements
The Faculty of Mathematics and Natural Sciences has a strategic ambition of being a leading research faculty. Candidates for these fellowships will be selected in accordance with this, and expected to be in the upper segment of their class with respect to academic credentials.

- Applicants must hold a PhD degree or equivalent in remote sensing/geomatics, glaciology or related fields in Earth, environmental or engineering sciences.
- The successful candidate has strong experience in the quantitative exploitation of remotely sensed satellite data from several sensor types, in particular ICESat and ICESat-2 laser altimetry, as well as optical or hyperspectral sensors, synthetic aperture radar data, or altimetry data.
- The candidate has to demonstrate experience in applying satellite remote sensing to topics such as glacier volume changes, mass balance or dynamics, snow cover/SWE and other snow parameters, or mountain and lowland permafrost.

The position requires a strong background, experience, and interest in remote sensing and/or photogrammetry theory and practice;

- quantitative processing and data handling of large amounts of Earth observation data;
- numerical modelling and programming (Matlab, IDL, Python, or similar languages);
- geoinformatics (ArcGIS, QGIS, etc.)

The candidate is expected to publish papers in leading, international journals, and must therefore be able to document previous publications in top-level journals. Fluency in English (written and spoken) and excellent communication and presentation skills are essential for this project position. Experience with international/ESA projects, project grant applications and Scandinavian language skills are an asset.

We offer
- salary NOK 566 700 - 608 200 per annum depending on qualifications in position as Researcher (position code 1109)
- a professionally stimulating working environment
- attractive welfare benefits and a generous pension agreement, in addition to Oslo’s family-friendly environment with its rich opportunities for culture and outdoor activities

How to apply
The application must include

- cover letter (statement of motivation, summarizing scientific work and research interest)
- Eventuell project description, including progress plan (max. X pages)
- CV (summarizing education, positions, pedagogical experience, administrative experience and other qualifying activity)
- copies of educational certificates (academic transcripts only)
- a complete list of publications
• X numbers of academic works that the applicant wishes to be considered
• List of reference persons: 2-3 references (name, relation to candidate, e-mail and phone number)

The application with attachments must be delivered in our electronic recruiting system, please follow the link “apply for this job”. Foreign applicants are advised to attach an explanation of their University’s grading system. Please note that all documents should be in English (or a Scandinavian language).

In assessing the applications, special emphasis will be placed on the documented, academic qualifications, the project description (whenever this is required in the call for applicants), and the quality of the project as well as the candidates motivation and personal suitability. Interviews with the best qualified candidates will be arranged.

It is expected that the successful candidate will be able to complete the project in the course of the period of employment.

Formal regulations
According to the Norwegian Freedom of Information Act (Offentleglova) information about the applicant may be included in the public applicant list, also in cases where the applicant has requested non-disclosure.

Inclusion and diversity are a strength. The University of Oslo has a personnel policy objective of achieving a balanced gender composition. We also want to have employees with diverse expertise, combinations of subjects, life experience and perspectives. We will make adjustments for employees who require this.

The University of Oslo has an agreement for all employees, aiming to secure rights to research results a.o.

Contact information
For further information please contact Professor Andreas Max Kääb, a.m.kaab@geo.uio.no
For questions regarding the recruitment system, please contact HR Adviser Ørjan Pretorius, orjan.pretorius@mn.uio.no

About the University of Oslo
The University of Oslo is Norway’s oldest and highest rated institution of research and education with 28 000 students and 7000 employees. Its broad range of academic disciplines and internationally esteemed research communities make UiO an important contributor to society.

The geosciences are the studies of the planet Earth and its comparative planetology; the atmosphere, the hydrosphere and cryosphere, the Earth’s surface and its interior. The Department of Geosciences conducts research and teaching in most of the domains of geoscience; geology, geophysics, physical geography, geomatics, hydrology, meteorology and oceanography. The Department is the broadest geoscience research and education environment in Norway. The Department encompasses five sections; Meteorology and Oceanography, Geography and Hydrology, Geology and Geophysics, Physics of Geological Processes (Njord centre) and one Centre of Excellence CEED - Centre of Earth Evolution and Dynamics.

The Department aims to contribute to the new and important UN Sustainability Development Goals.

The staff consists of 40 professors and associate professors, in addition to postdoctoral fellows, PhD students, researchers, technical- and administrative staff. Approximately number of employees are 240 at the Department.

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