UNIVERSITETET I OSLO

Jobbnorge ID: 209162
Deadline: 9/1/2021
Website: http://www.uio.no/
Scope: Fulltime
Duration: Engagement

PhD Research Fellow in glaciology

About the position

Position as PhD Research Fellow in global-scale glacier modeling available at the Department of Geosciences,

The fellowship will be for a period of 3 years for research towards a PhD degree. Pending on a separate application for those accepted into the PhD program, the contract period may be extended by the equivalent of maximum 1 year to include teaching obligations (25% per year). Candidates should indicate their interest in and experience with teaching in their applications for this fellowship.

No one can be appointed for more than one PhD Research Fellowship period at the University of Oslo.
Starting date can be earlier but no later than January 15, 2022.

Job Description

The PhD position is part of the project “Global glacier modelling: Do non-linear feedbacks matter for century-scale projections” funded by the Norwegian Research Council. The successful applicant will - together with another PhD student and a postdoctoral researcher - contribute to global-scale modeling of glaciers (outside the ice sheets) using the global model PyGEM with the ultimate goal to make global-scale glacier mass change projections based on an ensemble of climate projections.

The PhD student will have a great deal of freedom in shaping the exact methodology, modeling experiments and research questions of the project within the overarching topic of global glacier modeling. Topics may include but are not limited to improving the model physics, for example, with respect to calving or dynamic adjustments, investigating the effects of climate feedbacks and dynamic instabilities (surges) on large-scale projections, exploring innovative methods to assimilate available in-situ and remote sensing data products including GRACE for model input and validation, possibly including machine-learning, and assessing the sensitivity of projections to climate forcing.

Results may be analyzed with respect to the contribution of glaciers to sea-level rise and/or runoff. The student will be involved in the international Glacier Model Intercomparison Project GlacierMIP, and thus have ample opportunities for national and international collaboration, including in particular collaboration with PYGEM developer, Dr. David Rounce at Carnegie Mellon University, USA.

No fieldwork is anticipated directly for this project, but possibilities to gain field experience may well arise within other projects in the group. Funding is available for conference attendance, research visits with external collaborators as well as participation in summer schools or suitable classes elsewhere.

The PhD student will join a growing, lively, international research group focused on cryospheric sciences, hydrology, remote sensing, geohazards and geomatics (https://www.mn.uio.no/geo/english/about/organisation/geohyd/).

Qualification requirements

The Faculty of Mathematics and Natural Sciences has a strategic ambition to be among Europe’s leading communities for research, education and innovation. 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 Master’s degree or equivalent in geosciences, physics, computer science, mathematics, environmental sciences, engineering, or any related field. Candidates without a Master’s degree must complete their degree requirements prior to the start of the position.
- Foreign completed degree (M.Sc.-level) corresponding to a minimum of four years in the Norwegian educational system
- The candidate should have a strong quantitative background and experience in programing (Python/Matlab or similar) as well as a strong interest in geoscience, in particular glaciology. Previous experience in glaciology, numerical modeling and handling of large data set are desirable.

Grade requirements:

The norm is as follows:

- the average grade point for courses included in the Bachelor’s degree must be C or better in the Norwegian educational system
- the average grade point for courses included in the Master’s degree must be B or better in the Norwegian educational system
- the Master’s thesis must have the grade B or better in the Norwegian educational system
- Fluent oral and written communication skills in English
- English requirements for applicants from outside of EU/ EEA countries

The purpose of the fellowship is research training leading to the successful completion of a PhD degree.

The fellowship requires admission to the PhD programme at the Faculty of Mathematics and Natural Sciences. The application to the PhD programme must be submitted to the department no later than two months after taking up the position. For more information see:

http://www.uio.no/english/research/phd/

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We offer

- Salary NOK 491 200 - 534 40 per annum depending on qualifications and seniority as PhD Research Fellow (position code 1017)
- Attractive welfare benefits and a generous pension agreement
- Vibrant international academic environment
- Career development programmes
- Oslo's family-friendly surroundings with their rich opportunities for culture and outdoor activities

How to apply

The application must include:

- Cover letter - statement of motivation and research interests
- CV (summarizing education, positions and academic experience, scientific publications etc)
- Copies of the original Bachelor and Master's degree diploma, transcripts of records
- Documentation of English proficiency
- List of publications and academic work that the applicant wishes to be considered by the evaluation committee
- Names and contact details of 2-3 references (name, relation to candidate, e-mail and telephone 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).

Applicants may be called in for an interview.

Formal regulations

Please see the guidelines and regulations for appointments to Research Fellowships at the University of Oslo.

No one can be appointed for more than one PhD Research Fellowship period at the University of Oslo.

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.

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

The University of Oslo aims to achieve a balanced gender composition in the workforce and to recruit people with ethnic minority backgrounds.

Contact information

For further information please contact: Regine Hock, phone: +47 228 55804, e-mail: regine.hock@geo.uio.no

For questions regarding the recruitment system, please contact HR Adviser Torunn Standal Guttormsen, phone:+47 22854272, e-mail: t.s.guttormsen@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.

Additional information

Place of service:

Sem Sælandsvei 1 0315 Oslo (Oslo Municipality)