



Postdoctoral Research Fellow in Physical Oceanography

Job description

Position as Postdoctoral Research Fellowship available at The Department of Geosciences.

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

The appointment is a fulltime position and is made for a period of up to three years and three months.

Project description

The Arctic Ocean appears to be very sensitive to the on-going global climate changes, as most notably seen in its rapid sea ice retreat. The sea ice retreat is driven, in part, by changed atmospheric heat transport into the Arctic and by changed optical properties (e.g. the ice albedo feedback), but it is also linked to changes in the oceanic circulation and oceanic heat transport into the region. Many of the dynamical processes that govern these changes are still poorly understood.

The Fellow will study the variability in ocean circulation of the Barents Sea region and the Arctic Ocean in relation to different atmospheric conditions (i.e. large-scale atmospheric regimes). A particular focus will be on how the ocean bathymetry—known to be of lowest-order importance at high latitudes—impacts the response of both large-scale and mesoscale circulation features and heat transport in the region.

The position is linked to two large-scale, multi-institutional, research projects funded by The Research Council of Norway, namely the «[Nansen Legacy](#)» project and the «KeyClim» project. Work tied to the first project will focus on an improved process understanding of the dynamics governing wind-driven circulation changes while work tied to the second project will scrutinize how such dynamics is reproduced in the Norwegian Earth System Model (NorESM). An over-reaching theme here will be topographic control of mesoscale eddy transport and how such control may be implemented in parametrization schemes (current schemes lack any topographic sensitivity).

The Fellow will work with NorESM but also with regional high-resolution model hindcasts that resolve some of the topographic interactions on mesoscale transport. Idealized modelling aimed at improved process understanding may also be pursued. The work will be conducted in close collaboration with researchers at the University of Bergen, the Norwegian Research Centre (NORCE) and the Norwegian Meteorological Institute. A detailed project plan will be developed in collaboration with the successful candidate, depending on qualifications and interests.

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 degree equivalent to a Norwegian doctoral degree in physical/dynamical oceanography or meteorology. Doctoral dissertation must be submitted for evaluation by the closing date. Only applicants with an approved doctoral thesis and public defence are eligible for appointment.
- Fluent oral and written communication skills in English

The following additional qualifications will count in the assessment of the applicants:

- A good understanding and interest in geophysical fluid dynamics and geophysical data analysis.
- Experience with numerical ocean or atmosphere models
- Experience with programming (preferably Fortran, Python or Matlab)
- The ability to work independently but also collaborate in groups

The main purpose of a postdoctoral fellowship is to provide the candidates with enhanced skills to pursue a scientific top position within or beyond academia. To promote a strategic career path, all postdoctoral research fellows are required to submit a [professional development plan](#) no later than one month after commencement of the postdoctoral period.

We offer

- salary NOK 515 200 - 597 400 per annum depending on qualifications in position as Postdoctoral Research Fellowship (position code 1352)
- attractive [welfare benefits](#) and a generous pension agreement
- professionally stimulating working environment
- vibrant international academic environment
- [postdoctoral development programs](#)
- 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, summarizing scientific work and research interest)
- CV (summarizing education, positions, pedagogical experience, administrative experience and other qualifying activity)
- Copies of educational certificates, academic transcript of records and letters of recommendation
- A complete list of publications and up to 5 academic works 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. 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 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 completes the project in the course of the period of employment.

Formal regulations

Please see the [guidelines and regulations](#) for appointments to Postdoctoral fellowships at the University of Oslo.

No one can be appointed as Postdoctoral Fellow for more than one specified period at the same institution.

According to the Norwegian Freedom and 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

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For technical question regarding the recruitment system, please contact HR Adviser; Torunn Standal Guttormsen, 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 planet Earth; the atmosphere, the hydrosphere and cryosphere, the earth's surface and it's interior. **The Department of Geosciences** is Norway's widest ranging academic geoscience research environment, encompassing four sections (Meteorology and Oceanography, Geography and Hydrology, Geology and Geophysics, Physics of Geological Processes) and one Centre of Excellence (Centre of Earth Evolution and Dynamics). In addition we participate in other centres and hold several ERC grants. The staff consists of 40 professors and associate professors, in addition to postdoctoral fellows, PhD students, researchers, technical staff and administrative personnel, to a total number of 240.

Jobbnorge-ID: 170913, Søknadsfrist: Avsluttet