



The University of Bergen is a renowned educational and research institution, organised into seven faculties and approximately 54 institutes and academic centres. Campus is located in the centre of Bergen with university areas at Nygårdshøyden, Haukeland, Marineholmen, Møllendalsveien and Årstad.

There are seven departments and several centres at Faculty of Mathematics and Natural Sciences. [Read more about the faculty](#) and [departments](#).

Postdoctoral Research Fellow position within Atmospheric Hydrological processes

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Postdoctoral Research Fellow position within Atmospheric Hydrological processes of the Arctic, Antarctica, and the Tibetan Plateau

At the [Geophysical Institute](#), University of Bergen, there is a vacancy for a postdoctoral research fellow position. The position is for a fixed term of 3 years with the possibility for a 4th year with compulsory other work (e.g. teaching duties). The position will conduct research related to the Atmospheric Hydrological processes focusing on the Arctic (Greenland), Antarctica, and the Tibetan Plateau. The candidate will be part of the water isotope group at the Bjerknes Centre for Climate Research and the Geophysical Institute, with ERC Starting Grant SNOWISO and ERC Consolidator Grant ISLAS, and the Norwegian national infrastructure laboratory for light isotope analysis FARLAB. The water isotope group studies processes in the atmospheric water cycle with a particular focus on mid-latitude and polar conditions. Current work in the group relates to water isotope measurements in the field, ice core paleoclimate reconstruction, studies of snow processes, moisture source diagnostics, boundary layer processes, and regional and global studies using water isotope enabled models.

The place of work will be at the University of Bergen.

About the project/work tasks:

The main focus of the project is to investigate hydrological processes in the atmosphere in a changing climate. A particular focus will be on processes related to polar conditions in the Arctic (Greenland), Antarctica, and the Tibetan Plateau.

The candidate will employ methods such as Lagrangian moisture source diagnostics, regional and global isotope-enabled models, conceptual models, and field measurements of water isotopes to explore hydrological processes in a changing climate. A main objective for the position is to establish and conduct analytical methods to use water isotopes and moisture source diagnostics to characterize changes and processes of the hydrological cycle with a focus on Earth's cold regions.

The position will involve participation in fieldwork connected to the position. This also includes staying in remote and cold/primitive conditions with infrequent connection to the outside world in periods of several weeks at a time.

The successful candidate will engage in both experimental and analytical/modelling studies and contribute to develop innovative methods to conduct model-data comparison to document past, present and future changes in the hydrological cycle. Relating the work to large scale processes, impacts for society or methods for early warning detection is encouraged.

The project is expected to address some of the following research questions, depending on the background and interest of the candidate:

- Do water isotope observations indicate changes in the atmospheric hydrological cycle, and can water isotopes provide early warning indications of changes?
- How can abrupt changes in the hydrological cycle be detected in paleo-records, and how can we use this knowledge to detect present day changes?
- What are the processes controlling moisture transport into the Arctic, Antarctic, and Tibetan Plateau region, how have these processes varied in the past, and how will they vary in the future? The candidate will be encouraged to related changes to socio-economic consequences.

The successful candidate is expected to further develop the project in line with his/her interests. The candidate is encouraged to be involved with aspects related to Norway's participation in the Horizon 2020 Beyond EPICA Oldest Ice project.

Qualifications and personal qualities:

- Applicants must hold a PhD or an equivalent degree within the field of geochemistry (water isotopes)/geophysics/atmospheric science.
- The candidate must have experience and competence within measurements of liquid and water vapor isotopes through laser-based CRDS techniques. In addition, prior experience in taking snow/ice/liquid water isotope samples is an advantage.
- The candidate should demonstrate ability to conduct and analyze isotope-enabled atmospheric simulations (regional or global) of past or present climate. In addition, knowledge of moisture source diagnostics is an advantage.
- The candidate should have a solid background and working experience with the analysis of water isotope records from polar ice cores. Knowledge of different types of climate proxies from ice cores is an advantage.
- Prior experience from relevant field work is a requirement. Specifically, experience from work in the Polar regions is advantageous.
- Applicants must have excellent skills in oral and written English. In addition, it is an advantage if the applicant has good command of a Scandinavian language.
- Knowledge and practical experience with outreach and communication is a strong advantage.
- Applicants must be able to work independently and in a structured manner, and have the ability to cooperate with others.
- Personal skills will be emphasized. The candidate should be able to work independently and interactively in a team setting both in the field and in the laboratory. The candidate must be highly motivated and show enthusiasm for research. The candidate should demonstrate a clear idea where he/she wants to take the research.

About the position of postdoctoral research fellow:

The position of postdoctoral research fellow is a fixed-term appointment with the primary objective of qualifying the appointee for work in top academic positions. The fixed-term period for this position is 3 years, with the possibility for a 4th year, consisting of 25 % compulsory work (e.g. teaching responsibilities) distributed across the employment period. The 4th year is contingent on the qualifications of the candidate and the teaching needs of the department, and will be decided by Head of Department upon appointment.

Individuals may not be hired for more than one fixed-term period as a postdoctoral research fellow at the same institution.

Upon appointment, applicants must submit a project proposal for the qualifying work including a work schedule. For postdoctoral research fellow positions associated with externally financed projects, the completion of the project proposal for the qualifying work will take place in consultation with the project/centre manager. It is a requirement that the project is completed in the course of the period of employment.

We can offer:

- A good and professionally challenging working environment
- Salary at pay grade 59 (code 1352 / pay range 24, alternative 3) according to the state salary scale upon appointment. This constitutes a gross annual salary of NOK 515 200. Further promotions are made according to length of service. For particularly highly qualified applicants, a higher salary may be considered.
- Enrolment in the Norwegian Public Service Pension Fund
- A position in an inclusive workplace (IW)
- Good [welfare benefits](#)

Your application must include:

- A brief account of the applicant's research interests in relation to the research questions outlined above and motivation for applying for the position.
- The application must outline how your academic profile aligns with the requirements for the position.
- The names and contact information for two referees. One of these should be the main advisor from the PhD programme.
- CV
- Transcripts and diplomas and official confirmation that the doctoral thesis has been submitted
- Relevant certificates/references
- List of any works of a scientific nature (publication list)
- Publications (as applicable)

The application and appendices with certified translations into English or a Scandinavian language must be uploaded at [Jobbnorge](#)

General information:

For further details about the position, please contact: Dr. Hans Christian Steen-Larsen, Geophysical Institute, email: Hans.Christian.Steen-Larsen@uib.no, tel: +47 5558 2608.

The state labour force shall reflect the diversity of Norwegian society to the greatest extent possible. Age and gender balance among employees is therefore a goal. People with immigrant backgrounds and people with disabilities are encouraged to apply for the position. We encourage women to apply. If multiple applicants have approximately equivalent qualifications, the rules pertaining to moderate gender quotas shall apply.

Upon the expiry of the closing date for applications, an evaluation committee will be appointed. As an applicant, you have a right of access to the committee's description of your formal and professional qualifications. If you wish to take advantage of this right of access, please contact the executive officer in charge after receiving information about the appointment of the evaluation committee.

The University of Bergen applies the principle of public access to information when recruiting staff for academic positions.

Information about applicants may be made public even if the applicant has asked not to be named on the list of persons who have applied. The applicant must be notified if the request to be omitted is not met.

Further information about our employment process can be found [here](#).