UNIVERSITETET I BERGEN

University of Bergen
Geophysical Institute

Jobbnorge ID: 282384
Deadline: 8/3/2025
Website: https://www.uib.no/om/84775/ledige-stillinger-ved-uib
Scope: Fulltime
Duration: Fixed Term

PhD Research Fellow in the Mutual Impact of Climate Change and Offshore Renewable Energy

UiB - Knowledge that shapes society

Through robust and close interaction with the world around us - globally, nationally and locally - we shall be instrumental in building a society based on knowledge, skills and attitudes.

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Video: https://www.youtube.com/watch?v=oyaThmIq6Kg

PhD position

There is a vacancy for a PhD Research Fellow in Climate/Renewable-Energy at the Geophysical Institute University of Bergen. The position is associated with the Bergen Offshore Wind Center (BOW). The position is for a fixed-term period of 3 years with the possibility of a 4th year with compulsory other work (e.g. teaching at the Department). The position is funded by University of Bergen.

About the project/work tasks

Future energy systems will increasingly rely on renewable sources like offshore wind, wave, and solar power. However, these face challenges such as intermittency, space constraints, marine ecosystem impacts, and climate change vulnerability.

This PhD project, part of a broader departmental initiative, explores the interplay between climate change and offshore co-located renewable energy systems, with a primary focus on wind energy. It examines how climate change affects their efficiency and reliability and how large-scale systems impact regional or larger-scale climates. The candidate will collaborate with GFI's energy and climate groups on this research.

The project aims to assess the long-term climate impacts of large wind park clusters, starting with individual wind parks. The first phase involves integrating wind farm wake effects into a climate model to evaluate climate-energy interactions. Findings will inform studies on co-located multi-source energy systems at large wind park sites. Using advanced analysis and modeling, the research will support a framework for strategic renewable energy planning, optimizing wind, wave, and solar integration, especially during peak production seasons.

Qualifications and personal qualities

- Applicants must hold a master's degree or equivalent education in weather and climate sciences, physical oceanography and meteorology, applied mathematics, or equivalent, or must have submitted his/her master's thesis for assessment prior to the application deadline. It is a condition of employment that the master's degree has been awarded.
- Applicants must have strong programming skills in one or more languages (e.g., Python, MATLAB, Fortran, C++) and must demonstrate their proficiency.
- Strong analytical skills and capabilities in data processing and mathematical modelling is a requirement.
- Experience with weather or climate models is an advantage.
- Knowledge of the physics of wind, wave, and solar energy is an advantage.
- Applicants must be able to work independently and in a structured manner and demonstrate good collaborative skills.
- Applicants must be proficient in both written and oral English.

Personal and relational qualities will be emphasized. Research experience, ambitions and potential will also count when evaluating the candidates.

Special requirements for the position
The University of Bergen is subjected to the regulation for export control system. The regulation will be applied in the processing of the applications.

About the PhD position

The fellowship will be for a period of 3 years, with the possibility for a 4th year, consisting of 25 % career-promoting work (e.g. teaching responsibilities at the department) distributed over 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 the head of department upon appointment.

The employment period may be reduced if you have previously been employed in a qualifying post (e.g. research fellow, research assistant).

About the research training
As a PhD Research Fellow, you must participate in an approved educational programme for a PhD degree within a period of 3 years. The deadline for applying for admission to the PhD programme at The Faculty of Science and Technology is 2 months after you start your position or after the start of the research project that will lead to the PhD degree. It is a condition that you satisfy the enrolment requirements for the PhD programme at the University of Bergen.

We can offer

- a good and professionally stimulating working environment
- salary as PhD research fellow (code 1017) in the state salary scale. This constitutes a gross annual salary of NOK 568 700. Further increases in salary are made according to length of service in the position.
- enrolment in the Norwegian Public Service Pension Fund
- good welfare benefits

Your application must include

- a brief account of the applicant's research interests and motivation for applying for the position
- the names and contact information for two referees. One of these should be the main advisor for the master's thesis or equivalent thesis.
- CV
- transcripts and diplomas showing completion of the bachelor's and master's degrees. If you have not yet completed your master's degree, please submit a statement from your institution confirming that the master's thesis has been submitted.
- relevant certificates/references.
- approved documentation of proficiency in English (if required, cf. English language requirements for PhD admission).
- a list of any works of a scientific nature (publication list).

General information

For further details about the position, please contact Associate Professor Mostafa Bakhoday Paskyabi, Geophysical Institute/UiB, mostafa.bakhoday-paskyabi@uib.no) or Head of Department Tor Eldevik, Geophysical Institute, UiB (tor.eldevik@uib.no).

For HR related questions contact HR advisor Maria Svåsand, (maria.svasand@uib.no)

Diversity is a strength that enables us to solve our tasks even better. UiB therefore needs qualified employees regardless of gender, ethnicity, religion, worldview, disability, sexual orientation, gender identity, gender expression, and age.

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.

The successful applicant must comply with the guidelines that apply to the position at all times.

We encourage applicants with disabilities, immigrant backgrounds, or gaps in their CV to apply. By indicating such circumstances in your application, you may receive favourable consideration. We ensure that at least one qualified applicant from each of these groups is invited for an interview as part of our commitment to inclusivity and equal opportunity. For further information about the recruitment process, click here.

Life as a PhD candidate at UiB

Marion Claireaux tells about life and work as a PhD candidate at UiB.

Video: https://www.youtube.com/watch?v=nrtp6VxMeJ4&index=2&list=PLf8ZIYfAO0qjhROTj6SthDbSScg0lSO6G

About UiB

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 Science and Technology. Read more about the faculty and departments.

Additional information

Place of service:

Allegaten 70 5007 Bergen (Bergen Municipality)