UNIVERSITETET I OSLO

Jobbnorge-ID: 240848
Søknadsfrist: 15.03.2023
Nettside: http://www.uio.no/
Omfang: Heltid
Varighet: Vikariat/Midlertidig

PhD Research Fellow in Earth Sciences

Job description

A PhD Research Fellow position in Earth Sciences is available at the Njord Center/Department of Geosciences.

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

Starting date no later than October 1, 2023.

The fellowship period is 3 years. A fourth year may be considered with a workload of 25 % that may consist of teaching, supervision duties, and/or research assistance. This is dependent upon the qualification of the applicant and the current needs of the department.

We invite applications for a PhD position in Structural Geology and Petrology to investigate the mechanisms controlling the structure and evolution of volcanic plumbing systems and their implications for exploring natural resources (geothermal, ore deposits, hydrocarbons) associated with active and ancient volcanoes. The PhD project will use the ancient volcanic systems of the Oslo Rift as case study. The PhD student will conduct detailed ground-based and UAV-based structural mapping of exposed igneous intrusions and analyse rock samples of both the igneous rocks and their host rock using state-of-the-art analytical techniques of the Goldschmidt Laboratory at the University of Oslo.

The PhD is funded by the Faculty of Mathematics and Natural Sciences at the University of Oslo; it will be led by geoscientists of the Crustal Processes section of the Department of Geosciences and hosted at the Njord Center. Njord is a cross-disciplinary centre between the departments of Geosciences and Physics that aims to become one of the University of Oslo's main cross-disciplinary ‘drivers’ for the future development of Physical Sciences in general, and Earth-related research in particular. This PhD project is strategic for the new Crustal Processes section and will be integrated within on-going research activities in the Oslo Rift. The PhD project will mostly be based on fieldwork in the Oslo Rift, with particular focus on magma emplacement and processes associated with high-grade geothermal systems. Rock samples collected during the fieldwork will be analyzed using analytical and experimental facilities available at the host institution. The PhD student will also be integrated in the scientific team of project “BEYOND ELASTICITY - How inelastic properties of crustal rocks control the propagation of dykes and sills in volcanic plumbing systems” funded by the Research Council of Norway. This project runs run as a collaboration between the Njord Centre and the Mathematics Department at the University of Oslo, the University of Iceland, the University of Uppsala and Høgskulen på Vestlandet. The PhD candidate will have the opportunity to learn scientific methods from the fields of structural field geology, petrology, analogue modelling and numerical modelling, with the ambition to become a multi-skilled modern geoscientist.

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.

Required qualifications:

- Master’s degree or equivalent in Earth Sciences with competences in structural and metamorphic geology.
- Foreign completed degree (M.Sc.-level) corresponding to a minimum of four years in the Norwegian educational system.
- Candidates without a Master’s degree have until 30 June, 2023 to complete the final exam.

Competency in the following areas are also required:

- Geological field work and structural analysis.
- Igneous and metamorphic petrology.
- Rock mechanics.
- Experience with programming in Matlab and/or Python.

Desired qualifications:

- Field experience in the Oslo Rift.
- Modelling of magma emplacement.
- Experience with Structure-from-Motion and UAV surveys.

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 and exemptions from the requirements: https://www.mn.uio.no/english/research/phd/regulations/regulations.html#toc8

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

We offer

- Salary NOK 501 200 - 544 400 per annum depending on qualifications 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 work - scientific publications)
- Copies of the original Bachelor and Master's degree diploma and transcripts of records
- Documentation of English proficiency
- Letters of recommentation
- 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).

When evaluating the application, emphasis will be given to the applicant's academic and personal prerequisites to carry out the project. 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.

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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.

A fourth year may be considered with a workload of 25 % that may consist of teaching, supervision duties, and/or research assistance. This is dependent upon the qualification of the applicant and the current needs of the department.

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

Inclusion and diversity are a strength. The University of Oslo has a personnel policy objective of achieving a balanced gender composition. Furthermore, we want employees with diverse professional expertise, life experience and perspectives.

If there are qualified applicants with disabilities, employment gaps or immigrant background, we will invite at least one applicant from each of these categories to an interview.

Contact information

For further information, please contact:

Senior Researcher Olivier Galland, phone: +47 22 85 67 19, e-mail: olivier.galland@geo.uio.no

For questions regarding Jobbnorge, please contact HR Adviser Ole Rustad, e-mail: ole.rustad@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 Crustal Processes section is a new section of the Department of Geosciences at the University of Oslo. We focus on processes associated with tectonic deformation, faulting and volcanism. The section hosts 7 professors and associate professors, in addition to doctoral research fellows and postdoctoral fellows.

Njord is a cross-disciplinary Geology-Physics center hosted by the Faculty of Mathematics and Natural Sciences at the University of Oslo. We focus on the fundamental physics of geological processes related to: transport and reactions in deformable porous media, fracturing and fragmentation processes, interface dynamics during geophysical flows, and intermittency and pattern formation in geological systems far from equilibrium.

We conduct research on earth systems that range in scale from atoms to continents and apply methods where fieldwork, numerical modelling, experiments and theory act in concert.

The center includes the Oslo-branch of PoreLab, which is a Center of Excellence (CoE), the former CoE, Physics of Geological Processes (PGP) and several externally financed projects. There are 10 professors and associate professors at the center, in addition to doctoral research fellows, postdoctoral fellows, researchers and technical and administrative staff - in total about 55 persons.

Tilleggsinformasjon

Arbeidssted:

Sem Sælands vei 1 0371 Oslo (Oslo Kommune)