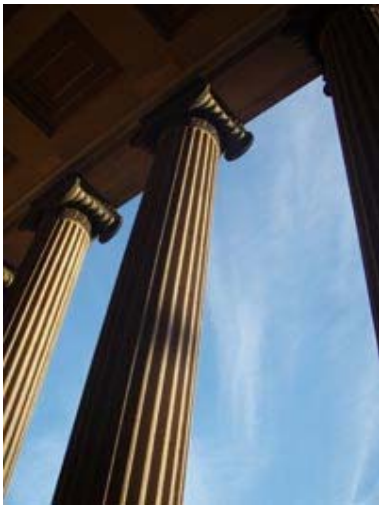
UiO : Universitetet i Oslo



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), one Centre of Excellence (Centre of Earth Evolution and Dynamics), and several centre nodes and 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 210.

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Department of Geosciences

Postdoctoral Research Fellowship in Numerical Modelling

Position as Postdoctoral Research fellow available at Department of Geosciences, University of Oslo, Norway.

The fellowship is for a period of 3 years. Starting date no later than 30 September, 2016.

No one can be appointed for more than one fixed-term period at the same institution.

Job/ project description:

We invite applications for a challenging postdoctoral position in numerical modeling of geological processes. The objectives of this project are to model the complex mechanics of rupture and friction in rocks, including the effect of fluids. This position is part of the project "Unravelling the spatio-temporal nature of rock deformation using 4D X-ray tomography" where rock deformation processes at mid-crustal conditions will be modeled. The current position involves computational modelling of the couplings between fluid flow, rock transformation, and deformation at the grain to core sample scales. The specific goal of the position is open and will depend on the candidate's research plan that should be handed in with the application. The candidate will be part of a lively research environment in deformation of solids in the presence of fluids, involving six other young scientists, with expertise spanning from field work, X-ray tomography, laboratory modeling, numerical modeling and theoretical modeling. The candidate will be at strategic interface between laboratory and numerical modeling activities. The position includes collaboration between the University of Oslo (discrete element models, laboratory experiments and field work, Profs. K. Mair, A. Malthe-Sørrenssen, F. Renard) and the University of Copenhagen (lattice Boltzmann and finite element models, Prof. J. Mathiesen), and also with a number of other international partners. The successful candidate will have the opportunity to participate in international research networks. The position is funded by the Norwegian Research Council.

The position is affiliated with the section for Physics of Geological Processes (PGP), which has long-term experience in modelling fracture, friction, and flow processes. The section is located in the Physics building of the University of Oslo, and the successful applicant will evolve in the multidisciplinary environment of PGP between geosciences and physics.

Requirements/qualifications:

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 PhD degree or equivalent in Earth Sciences or Physics with experience in geological processes, such as:

- Fracture and solid mechanics
- Fluid dynamics
- Rock physics
- Structural geology

The position requires a strong background and interest in one or several of these topics:

- Advanced programming and numerical modeling;
- Friction and faulting
- Flow in porous media

Priority will be given to candidates with multidisciplinary experience.

In assessing the applications, special emphasis will be given to:

- The applicant's academic and personal qualifications in order to execute the project
- The applicant's ability to complete research training
- The applicant's mobility

- Good communication and collaboration skills and an ability to join interdisciplinary academic communities

The main purpose of post-doctoral research fellowships is to qualify researchers for work in top academic positions within their disciplines.

Please also refer to the regulations pertaining to the conditions of employment for post-doctoral fellowship positions.

A good command of English is required.

Salary:

Position code 1352 (Postdoc), Pay Grade: 57-64 (from 483 700 to 550 400 NOK/year, depending on qualifications and seniority).

Health benefits are included.

The application must include:

- Application letter
- Outline of a research plan or research interest
- CV (summarizing education, positions and academic work - scientific publications)
- Copies of educational certificates, transcript of records and letters of recommendation
- 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)

Please remember that **all** documents should be in English or a Scandinavian language.

The University of Oslo is an equal opportunity employer and seeks in particular to increase its number of female scientists. Women are therefore particularly encouraged to apply.

UiO has an agreement for all employees, aiming to secure rights to research results.

Region:
Oslo

Job type:
Contract

Working hours:
Full-time

Working days:
Day

Application deadline:
31 May, 2016

Reference number:
2016/3642

Home page:
http://www.geo.uio.no

Contacts:
Associate Professor Karen Mair
Professor Francois Renard
Questions regarding Easycruit, contact Olaf Kristian Sund
Telephone: +47 22855444

Send application

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