

Jobbnorge ID: 234524 Deadline: 11/14/2022 Website: http://www.uio.no/

Scope: Fulltime

Duration: Temporary

PhD Research Fellow in Planetary Sciences/Exoplanetary Research

Job description

A PhD Research Fellowship position on the study of earth-like exoplanet populations is available at the Centre of Excellence, Centre for Earth Evolution and Dynamics (CEED) at the Department for Geosciences of the University of Oslo (UiO).

The successful candidate will work on aspects towards the diversity of terrestrial exoplanets, and pursue her/his PhD studies. The fellowship is for a period of 3 years, with the possibility to apply for a 4th year to teach relevant subjects at the institute's bachelor's or Msc program. We are looking for a self-motivated, highly qualified candidate with solid theoretical background and in the upper segment of his/her class. The successful candidate will work in international teams, and good written and oral communication skills in English are required.

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

Starting date is anticipated for January 2023.

More about the position

We are now at the dawn of a new era of space telescopes surveying exoplanets, which will provide exciting new data on many different types of exoplanets. In the future, more of them will have Earth-like sizes and potentially Earth-like orbits. Spectral data of exoplanets' atmospheres could provide clues for the surface and interior of these planets. So far, comprehensive and integrated investigations have been performed mainly for gas and ice giants. Here we want to develop models of the likely structures of exoplanets with Earth-like mass and size. New models shall combine currently available data of stars, exoplanets and our understanding of planetary system evolution to examine how to recognize a planet at similar pressure and temperature conditions and with similar composition to the Earth.

The successful candidate shall evaluate the variability of planet structures based on experimental and computational mineral physics, and use stellar compositional variations as input parameter. Predictions on the relation between internal structure and composition and atmosphere could be the outcome.

We provide an international and multi-disciplinary team with expertise across comparative planetology, mineralogy, experimental and computational mineral physics, astrophysics, geophysics.

Qualification requirements

The Faculty of Mathematics and Natural Sciences has a strategic ambition is 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.

- A Master's degree or equivalent in natural sciences (e.g., geosciences, planetary sciences, astrophysics, or physics)
- Foreign completed degree (M.Sc.-level) must correspond to a minimum of four years in the Norwegian educational system
- Experience in working within Exoplanet Research is an asset
- · Ability and willingness to participate in interdisciplinary research
- Fluent oral and written communication skills in English
- Good programming skills in languages, such as Python, C/C++, and/or similar

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

English requirements for applicants from outside of EU/ EEA countries and exemptions from the requirements: http://www.mn.uio.no/english/research/phd/application/application.html

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/

Personal skills

Creativity and innovation are valued, as is a demonstrated high working capacity, passion for research, and self-motivation. The candidate should expect to work in a highly collaborative team-oriented environment and participate in a wide array of activities related to planet evolution.

We offer

- Salary NOK 501 200 526 100 per annum depending on qualifications in a position 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 summarizing applicant's motivation and accomplishments
- CV (summarizing education, positions and academic work scientific publications)
- A brief account (up to one page, as a separate file) of the applicant's interests and motivation for applying for the position
- · Copies of the original Master's degree diploma and transcripts of records
- · Documentation of English proficiency
- List of up to 3 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).

Applicants may be called in for an interview on short notice, which can be in person or online.

Formal regulations

Please see the guidelines and regulations for appointments to Research Fellowships at the University of Oslo.

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

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.

The appointment may be shortened/given a more limited scope within the framework of the applicable guidelines on account of any previous employment in academic positions.

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

Professor Stephanie Werner, email: stephanie.werner@geo.uio.no

For technical questions regarding the recruitment system, please contact HR Ole Rustad, email: 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.

Centre for the Earth Evolution and Dynamics (CEED) is a Norwegian Centre of Excellence that provides a stimulating and well-funded research environment. The main goal of the centre is to develop a model that explains how mantle processes drive plate tectonics and trigger massive volcanism and associated environmental and climate changes throughout Earth's history.

The centre explores the distribution and history of tectonic plates in time and space, and examines the driving mechanisms that steer all stages of the 'Wilson Cycle', and aims to establish the links between Earth's interior, crust and oceans, atmosphere and biosphere.

CEED endeavors to also unravel similarities and differences of our planet with earth-like planetary bodies. The centre was established in 2013 and consists of ca. 70 full time and part time professors and researchers, PhD Research Fellows and Postdoctoral Research Fellows.

Additional information

Place of service:

Problemveien 7 0313 Oslo (Oslo Municipality)