Postdoctoral fellowships in experimental Soft Matter Physics and Fluid Mechanics (two positions)

Job description

Two Post-Doctoral fellowships in experimental Soft Matter Physics and Fluid Mechanics are available at the section for Mechanics at the Department of Mathematics, University of Oslo.

No one can be appointed for more than one Post-Doctoral Fellowship period at the University of Oslo.

The fellowships will be for a period of 3 years. Starting date no later than 01.11.2020.

The positions are part of the project “Nano- and micro- poro-elastic fog nets for waterharvesting” funded by the Research Council of Norway. Access to fresh water is the foundation for life on Earth that poses severe restrictions and requirements for life in regions that contended with water scarcity. A fog net is a low cost, efficient and simple technology for harvesting water from the atmosphere. The goal of this project is to develop novel fog nets with poro-elastic materials. The project involves close collaboration between experiments and other group members working on theoretical modelling, where the concepts developed in the project will be tested in the field in Africa where the fog net technology is already in use. The planned work involves understanding droplet flow on poro-elastic materials (position 1) and describing the flow of droplet through fog-nets (position 2), with opportunities to work with international collaborators.

The Post-doctoral fellows will:

- Develop poro-elastic materials and characterise capillary flow of droplets (position 1)
- Develop net structures, sensors and characterise the flow through the net by using particle tracking velocimetry and/or particle image velocimetry (position 2)
- Work in an interdisciplinary team with expertise in mechanics, physics and biophysics

The main purpose of a postdoctoral fellowship is to provide the candidates with enhanced skills to pursue a scientific top position within or beyond academia. To promote a strategic career path, all postdoctoral research fellows are required to submit a professional development plan no later than one month after commencement of the postdoctoral period.

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.

- Applicants must hold an experimental PhD degree or equivalent in mechanics, fluid mechanics, physics or applied mathematics. Doctoral dissertation must be submitted for evaluation by the closing date. Appointment is dependent on the public defence of the doctoral thesis being approved.
- Fluent oral and written communication skills in English
- Good social and collaboration skills and ability to work independently and in an interdisciplinary scientific environment

We offer

- salary NOK 523 200 - 605 500 per annum depending on qualifications in position as Postdoctoral Research Fellow (position code 1352)
- a professionally stimulating working environment
- attractive welfare benefits and a generous pension agreement, in addition to Oslo’s family-friendly environment with its rich opportunities for culture and outdoor activities
- postdoctoral development programmes
- possibility to work in an interdisciplinary and diverse research team

How to apply

The application must include

- Cover letter including a description of scientific interests and the motivation for applying for the position (max. 2 pages)
- 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)
The application with attachments must be delivered in our electronic recruiting system. 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 will normally be called in for an interview.

It is expected that the successful candidate will be able to complete the project in the course of the period of employment.

**Formal regulations**

Please see the [guidelines and regulations](#) for appointments to Postdoctoral 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.

The University of Oslo has an [agreement](#) for all employees, aiming to secure rights to research results etc.

The University of Oslo aims to achieve a balanced gender composition in the workforce and to recruit people with ethnic minority backgrounds.

**Contact information**

For further information please contact: Associate Professor Andreas Carlson, phone: +47 22857223, e-mail: acarlson@math.uio.no

For information regarding the recruitment system please contact: Hr adviser Nina Holtan, phone: +47 22854242, e-mail: nina.holtan@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.

Department of Mathematics is part of the Faculty of Mathematics and Natural Sciences. The Department is engaged in research covering a wide spectrum of subjects within mathematics, mechanics and statistics.

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