

Jobbnorge ID: 217108 Deadline: 1/10/2022 Website: http://www.uio.no/

Scope: Fulltime

Duration: Engagement

# PhD Research Fellowship in Soft Biomaterials and Interface Science

#### Job description

The fellowship is for a period of 3 years. Starting date: as soon as possible. No one can be appointed for more than one fixed-term at the same institution.

### **Project description**

The project aims at elucidating the impact of interfaces at the nano- and micro- scale, on the behavior of biological soft materials. The focus of the project is surface-adhered artificial cells and their capabilities of performing prebiotic- or other chemical reactions. The utilized solid substrates can be nano-engineered synthetic surfaces, or of natural origin, e.g. minerals.

Major parts of the project work are design, fabrication and characterization of solid surfaces, preparation of bio-samples e.g. cell-derived or synthetic lipid vesicles, as models of primitive cells, their micromanipulation using glass capillaries, IR lasers, and microfluidic devices. The observations of the samples will be carried out by optical and surface microscopy.

## Requirements/qualifications

- By the start date of the PhD position, the candidate must hold a master's degree or equivalent (or must have handed in the master's thesis) in materials science, chemistry, physics or biology (required)
- Practical knowledge of microfabrication procedures/clean room experience (preferred)
- Experience with biological samples e.g. liposomes, cell culturing or similar (preferred)
- Working knowledge of image analysis (Matlab, Python or similar) Preferably: successfully completed programming education during undergraduate studies (preferred)
- Practical knowledge of light and surface microscopy (preferred)
- · Advanced level English in reading, writing and speaking (required)

The candidate is expected to enroll in the PhD program at the Faculty of Mathematics and Natural Sciences, which has a strategic ambition of becoming a leading research faculty. Candidates for these fellowships will be selected in accordance to this strategy, and expected to be in the upper segment of their class with respect to academic credentials.

This position is funded by the University of Oslo. 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 2 months after taking up the position. For more information see:

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

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Regarding the scientific inquiries please contact: Dr. Irep Gözen, phone: +4722840596, e-mail: irep@uio.no

#### We offer

- The position will be placed as SKO 1017 (position code) with salary NOK 491 200 543 500 per year depending on qualifications and seniority.
- 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

#### How to apply

The application must include

Application letter stating the motivation for applying for this position (required)

- 1-2 (max) page assay including the candidate's own project idea addressing the project description/focus, containing purpose, methods/materials to be used, experimental design, expected outcome (required).
- CV (summarizing education, positions, method competence, academic work and scientific publications)
- · Copies of educational certificates, transcript of records and letters of recommendation
- Documentation of English proficiency: <a href="https://www.mn.uio.no/english/research/phd/application/application.html">https://www.mn.uio.no/english/research/phd/application/application.html</a>
- Names and contact details of 2-3 references (name, relation to candidate, e-mail and telephone number)

For further information about the group, see <a href="http://www.softlabnorway.com/">http://www.softlabnorway.com/</a>

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.

#### 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. We also want to have employees with diverse expertise, combinations of subjects, life experience and perspectives. We will make adjustments for employees who require this.

If there are qualified applicants with special needs, gaps in their CVs or immigrant backgrounds, we will invite at least one applicant in each of these groups to an interview.

#### **Contact information**

The inquiries regarding the technical aspects of the application can be directed to Nina Modahl, e-mail: ninam@ncmm.uio.no

# **About the University of Oslo**

The University of Oslo is Norway's oldest and highest ranked educational and research institution, with 28 000 students and 7000 employees. With its broad range of academic disciplines and internationally recognised research communities, UiO is an important contributor to society.

Centre for Molecular Medicine Norway (NCMM) was established in 2008 and is the Norwegian node in the Nordic EMBL Partnership for Molecular Medicine. NCMM is a joint venture between the University of Oslo, Health Region South-East and the Research Council of Norway. From 2017 NCMM is merged with the Biotechnology Centre of Oslo and now has altogether 11 research groups. The overall objective of NCMM is to conduct cutting edge research in molecular medicine and biotechnology as well as facilitate translation of discoveries in basic medical research into clinical practice.

#### Additional information

#### Place of service:

Oslo Science Park 0316 Oslo (Oslo Municipality)