UNIVERSITETET I OSLO

Jobbnorge-ID: 139523
Søknadsfrist: Avsluttet
Nettside:
Omfang:
Varighet:

PhD Research Fellowship in microfluidics/mass spectrometry for Organ on Chip

Position as PhD Research fellow available at the Bioanalytical Chemistry group in collaboration with the Nanostructured Functional Materials group at the Department of Chemistry, University of Oslo (UiO).

The fellowship will be for a period of 3 years, with no compulsory work or for a period of 4 years, with 25 % compulsory work (either responsibilities at UiO:Life Science or teaching responsibilities at the Department) contingent on the qualifications of the candidate and the teaching needs of Department of Chemistry. For teaching, the candidate must be proficient in a Scandinavian language.

Starting date no later than 01.11.2017.

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

Job/ project description:

The position is part of the Convergence environment “organ on a chip and nano-devices” and will be linked to the recently funded center of excellence for organ on a chip development. Convergence environments are interdisciplinary research groups that will aim to solve grand challenges related to health and environment. They are funded by UiO's interdisciplinary strategic area UiO:Life Science (http://uio.no/life-science).

This particular PhD project is a workpackage (WP) in this convergence environment and aims at measuring protein and metabolite components in an intra-organoidal flow (between organ cartridges in the chip), highly miniaturized liquid chromatography-mass spectrometry (LC-MS) platforms have to be developed that reach unprecedented sensitivity and can handle extremely small volumes. In addition, quantitative methods need to be adapted that allow assaying changes such expected upon physiological changes within the organoids, or drug exposure. In addition to novel separation platforms, the transition from LC separation to MS must be improved, as chip-format electrospray interfaces are currently rather fragile, and not well suited for the robustness that the open source format would demand. Therefore, novel materials and coatings for electrospray emitters will be developed, tailored for the Organ on Chip (OoC) format.

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 Master’s degree or equivalent in chemistry or similar disciplines.

Candidates must have experience in at least one of the following subjects: MS analysis of small samples, miniaturized LC-MS (e.g. capillary LC, nano LC), thin film deposition.

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/

A good command of English is required.

Salary:

Position code 1017, Salary: NOK 436 900 - 490 900 per year depending on qualifications and seniority.

The application must include:

- Application letter
- CV (summarizing education, positions and academic work - scientific publications). The top of the CV must have a statement of practical and theoretical experience with MS analysis of small samples, miniaturized LC-MS (e.g. capillary LC, nano LC) and/or thin film deposition, and details of skillsets related to these topics described in the CV. If these requirements are not met, the applicant will not be considered qualified.
- Copies of educational certificates, transcript of records and letters of recommendation
- Documentation of English proficiency http://www.mn.uio.no/english/research/phd/application/application.html

- 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)

Foreign applicants are advised to attach an explanation of their University's grading system. Please remember that **all** documents should be in English or a Scandinavian language.

In accordance with the University of Oslo's equal opportunities policy, we invite applications from all interested individuals regardless of gender or ethnicity.

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

For more information, please contact Associate Professor Steven Ray Wilson. E-mail: stevenw@kjemi.uio.no, or Professor Ola Nilsen. E-mail: ola.nilsen@kjemi.uio.no

For questions regarding the recruitment system, please contact HR-officer Nina Holtan. E-mail: nina.holtan@mn.uio.no

Tilleggsinformasjon

Arbeidssted: