

Jobbnorge ID: 164719 Deadline: 3/1/2019 Website: http://www.uio.no/

Scope: Fulltime

Duration: Fixed Term

Postdoctoral Research Fellowship position in Chemistry

Job description

Applicants are invited for a 2-year position as postdoctoral fellow at the <u>Center for Materials Science and Nanotechnology</u>, <u>Department of Chemistry</u>, University of Oslo as part of an RCN funded project. Employment is pending on the completion of the required contracts between the project partners and the funding agency.

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

The starting date of the position is between April 1 and May 1, 2019.

More about the position

Valorization of CO2 as carbon source for commodity products is an integral part of a future circular economy scheme. The position is part a project devoted to conversion of CO2 and H2 to light hydrocarbons by cascade reactions over bifunctional nanocatalysts.

The Postdoctoral Research Fellow will be responsible for catalytic testing of materials prepared in-house and in partner laboratories for the CO2 hydrogenation reaction, and for preparation and characterization of mixed metal/metal oxide nanoparticles. The successful candidate will be involved in supervision and lab instructions of (under-)graduate students within catalyst testing, ranging from screening tests to detailed mechanistic investigations

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

About the Catalysis Section:

The Catalysis section at the <u>Center for Materials Science and Nanotechnology</u> at the <u>Department of Chemistry</u> is studying the correlation between catalyst composition and their effects on chemical reactions. The catalysts can be of organic and/or inorganic origin. The Catalysis section has approximately 40 members, subdivided into three groups: the zeolite group synthesizes and characterizes zeolite and zeotype materials and studies catalytic reactions over those materials; the MOF-group does the same with metal-organic frameworks; the homogenous catalysis group synthesizes metal-organic complexes and studies their catalytic reactions.

More about the section: https://www.mn.uio.no/kjemi/english/research/groups/catalysis/

Employment in the Catalysis section will enable the successful candidate to work in a highly cross-disciplinary field in an internationally competitive research group. Research in the Catalysis section comprises extensive international collaboration

Qualification requirements

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 degree equivalent to a Norwegian doctoral degree in chemistry. The Doctoral thesis must be approved by the time of application.
- Extensive experience with catalytic testing that involves conversion of gaseous reactants over solid catalysts, including high pressure testing, is an absolute requirement. Prior knowledge of the CO2 hydrogenation reaction is considered an advantage
- Experience from synchrotron radiation facilities, preferably including operando studies
- Experience with preparation of metal/mixed metal/mixed oxide nanoparticles
- Experience with standard characterization methods, such as SEM-EDX, FT-IR, XRD, N2 physisorption, TGA, NMR, TEM and XPS
- Fluent oral and written communication skills in English
- Oral communication skills in a Scandinavian language is considered an advantage

Please also refer to the regulations pertaining to the conditions of employment for post-doctoral fellowship positions: https://www.uio.no/english/about/regulations/personnel/academic/regulations-employment-conditions-postdoc.html

Personal skills

- Ability to conduct high-quality independent research within a broad collaboration
- Interpersonal communication skills and the ability to work as part of a team
- Willingness to work together with PhD and/or Master/Bachelor students in specialty field
- · Self-motivation, creativity, genuine curiosity about the subject, work discipline, professional ethics, and ambition

We offer

• Salary NOK 515 200 - 597 400 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

How to apply

The application must include

- · Cover letter (statement of motivation, summarizing scientific work and research interest)
- · CV (summarizing education, positions, pedagogical experience, administrative experience and other qualifying activity)
- · Copies of educational certificates, academic transcript of records and letters of recommendation
- A complete list of publications and up to 3 academic works 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).

In assessing the applications, special emphasis will be placed on the documented, academic qualifications, as well as the candidate's motivation and personal suitability. Interviews will be arranged with the best qualified candidates.

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.

No one can be appointed as Postdoctoral Fellow for more than one specified period at the same institution.

According to the Norwegian Freedom and 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.

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Contact information

For further information please contact: Prof. Unni Olsbye phone: +47 228 55456, e-mail: unni.olsbye@kjemi.uio.no

For technical questions regarding the recruitment system, please contact HR Officer Ørjan Pretorius, e-mail: orjan.pretorius@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 Materials Science and Nanotechnology (SMN) is an interdisciplinary focus field for material and energy research at the University of Oslo. SMN has focused on basic research in renewable energy and environmentally friendly use of fossil energy sources. The center consists of research groups from the Department of Physics (Fi) and Chemistry (Ki), has about 100 employees from around the world and manages more than 80 projects funded by the EU, the RCN and others.

Additional information

Place of service:

Problemveien 7 0313 Oslo (Oslo Municipality)