

# Postdoc Position in Selective CO<sub>2</sub> Capture by MOF materials

The Water Engineering Innovation (WEI) Lab at Department of Biological and Chemical Engineering, Aarhus University, invites applications for an 18-month postdoc position offering applicants an exciting opportunity to join a new research project on MOF-enhanced CO<sub>2</sub> capture.

Expected start date and duration of employment

This is an 18-month position from 1 October 2022 or as soon possible.

Job description

This project aims to fabricate metal organic frameworks (MOFs) for selective CO<sub>2</sub> capture and measurement.

The key tasks in this project will be:

- Design and assembly MOFs selective to CO<sub>2</sub>
- Exclude interfering ions/molecules such as H<sub>2</sub>S
- Evaluate scalability and feasibility
- Communicate with industrial partners
- Write manuscripts and mentor master/bachelor students

Your profile

Required education and skills:

- Applicants should hold a PhD in Chemistry, Material Science, Chemical Engineering, or similar
- Strong background in synthetic chemistry and MOFs fabrication
- Practical experience in sensor will be a plus
- Self-motivated, pro-active, team- and goal-oriented personality
- Good communication and/or language skills in English

Who we are

The Department of Biological and Chemical Engineering represents multidisciplinary research fields within the sections of medical biotechnology, industrial biotechnology, process and materials engineering, and environmental engineering.

The Water Engineering Innovation group headed by Zongsu Wei focuses on sustainable water and energy production. We offer an exciting opportunity to join an ambitious research project of CO<sub>2</sub> capture in collaboration with universities and industries.

For more information: <https://bce.au.dk/en/research/key-areas-in-research-and-development/environmental-engineering/water-engineering-innovation/>

What we offer

The department offers:

- a well-developed research infrastructure, laboratories and access to shared equipment
- an exciting interdisciplinary environment with many national, international and industrial collaborators
- a research climate encouraging lively, open and critical discussion within and across different fields of research
- a work environment with close working relationships, networking and social activities
- a workplace characterised by professionalism, equality and a healthy work-life balance.

Place of work and area of employment

The place of work is the Environmental Engineering Section at the Department of Biological and Chemical Engineering, Aarhus University, Universitetsbyen 36, 8000 Aarhus C, and the area of employment is Aarhus University with related departments.

Contact information

For further information, please contact: Assistant Professor Zongsu Wei, phone number: +45 9352 2047, email: [zwei@bce.au.dk](mailto:zwei@bce.au.dk).

Deadline

Applications must be received no later than 3 July 2022.

#### Application procedure

Shortlisting is used. This means that after the deadline for applications – and with the assistance from the assessment committee chairman, and the appointment committee if necessary, – the head of department selects the candidates to be evaluated. All applicants will be notified whether or not their applications have been sent to an expert assessment committee for evaluation. The selected applicants will be informed about the composition of the committee, and each applicant is given the opportunity to comment on the part of the assessment that concerns him/her self. Once the recruitment process is completed a final letter of rejection is sent to the deselected applicants.

#### Letter of reference

If you want a referee to upload a letter of reference on your behalf, please state the referee's contact information when you submit your application. We strongly recommend that you make an agreement with the person in question before you enter the referee's contact information, and that you ensure that the referee has enough time to write the letter of reference before the application deadline.

Unfortunately, it is not possible to ensure that letters of reference received after the application deadline will be taken into consideration.

#### Formalities and salary range

Technical Sciences refers to the [Ministerial Order on the Appointment of Academic Staff at Danish Universities under the Danish Ministry of Science, Technology and Innovation](#).

The application must be in English and include a curriculum vitae, degree certificate, a complete list of publications, a statement of future research plans and information about research activities, teaching portfolio and verified information on previous teaching experience (if any). Guidelines for applicants can be found [here](#).

Appointment shall be in accordance with the collective labour agreement between the Danish Ministry of Finance and the Danish Confederation of Professional Associations. Further information on qualification requirements and job content may be found in the [Memorandum on Job Structure for Academic Staff at Danish Universities](#).

Salary depends on seniority as agreed between the Danish Ministry of Finance and the Confederation of Professional Associations.

Aarhus University's ambition is to be an attractive and inspiring workplace for all and to foster a culture in which each individual has opportunities to thrive, achieve and develop. We view equality and diversity as assets, and we welcome all applicants.

Research activities will be evaluated in relation to actual research time. Thus, we encourage applicants to specify periods of leave without research activities, in order to be able to subtract these periods from the span of the scientific career during the evaluation of scientific productivity.

Aarhus University offers a broad variety of services for international researchers and accompanying families, including relocation service and career counselling to expat partners. Read more [here](#). Please find more information about entering and working in Denmark [here](#).

Aarhus University also offers a Junior Researcher Development Programme targeted at career development for postdocs at AU. You can read more about it [here](#).

*The application must be submitted via Aarhus University's recruitment system, which can be accessed under the job advertisement on Aarhus University's website.*

#### Aarhus University

*Aarhus University is an academically diverse and research-intensive university with a strong commitment to high-quality research and education and the development of society nationally and globally. The university offers an inspiring research and teaching environment to its 38,000 students (FTEs) and 8,000 employees, and has an annual revenues of EUR 885 million. Learn more at [www.international.au.dk/](http://www.international.au.dk/)*