PostDoc Position: Using bio-integrated carbon and conversion for microbial production of acetate and methane

The Department of Biological Chemical Engineering, Aarhus University, invites applicants for a 24 months position within the field of **Carbon Capture and Utilization** focused on the microbial conversion of CO2 to methane and acetic acid.

Expected start date and duration of employment

This is a 24 month position starting from 1st of July 2026 or as soon possible.

The Research Project

You will be part of the Novo Nordisk Foundation CO_2 Research Center (CORC), whose mission is to advance knowledge and technology within the field of Carbon Capture and Utilization. CORC is an interdisciplinary research center bringing together experts in biotechnology, chemistry, and engineering to address one of the most pressing challenges of this century. For more information, please visit www.corc.au.dk.
Using your expertise in microbiology or biotechnology, you will contribute to the development of biotechnological processes for the production of CO_2-neutral chemicals—specifically methane and acetic acid—using renewable energy and CO_2 derived from industrial sources.
Your work will involve the design and operation of reactor systems for the capture and conversion of CO_2 from flue gases, as well as fundamental and applied studies of anaerobic microorganisms that catalyze the conversion of H_2 and CO_2 into CO2-neutral bio-products.

Your profile

Applicants should hold a PhD in microbiology and/or biotechnology and demonstrate strong expertise and hands-on experience in the following areas:

- Operation of H_2/CO_2-based biological reactor systems
- Practical experience working with anaerobic pure cultures, particularly methanogens and/or acetogens
- Experience with application of complex (mixed) microbial cultures
- Practical experience with analytical techniques, including gas chromatography
- Fluent in English, both written and spoken

The successful candidate will join the research group *Microbial Conversion Technologies* within the Department of Biological & Chemical Engineering. As a member of the group, you are expected to actively contribute as a team player, including participation in student co-supervision and the day-to-day research and operational tasks of the group.
The place of work is Gustav Wieds Vej 10C, 8000 Aarhus C and the Aarhus University Energy Research Facility located at AU Campus Viborg (https://dca.au.dk/en/about-dca/au-foulum).

Who we are

The Department of Biological and Chemical Engineering (BCE) has strong research sections in Biotechnology, Environmental and Process Engineering. Industrial impact is at the core of our research and translation of results into solving relevant societal challenges is a highly prioritized part of our work.

What we offer

The Department of Biological and Chemical Engineering offers:

- the opportunity to be part of a team developing novel technologies for sustainable fuels and to make a high impact through solving of climate change issues.
- a well-developed research infrastructure, laboratories and pilot-scale facilities
- 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

Application Deadline:
06 May 2026

Institute/Faculty:
Department of Biological and Chemical Engineering

Faculty:
Faculty of Technical Sciences

Academic contact person:
Michael Vedel Wegener Kofoed
Lektor
+4593521051
mvk@bce.au.dk
+4593521051

Vacant positions:
1-2

Number of months:
24

Hours per week:
37

Expected date of accession:
01/07/2026

activities.

- a workplace characterised by professionalism, equality and a healthy work-life balance.

Place of work and area of employment

The area of employment is Aarhus University with affiliated institutions. The position includes two permanent workplace addresses in Aarhus and the research facility at AU Campus Viborg respectively.
The attendance at each workplace address is by agreement with your immediate supervisor. In Aarhus the place of work is Gustav Wieds Vej 10, DK-8000 Aarhus C. At AU Campus Viborg, the address will be Burrehøjvej 43, DK-8830 Tjele.

Contact information

For further information please contact: Research Group Leader & Associate Professor Michael Vedel Wegener Kofoed mvk@bce.au.dk.

Deadline

Applications must be received no later than 6th of May, 2026.

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.

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.

If you wish to add a referee **after** you have submitted your application, you must send this person's details (name, job title, place of work, and email address) as well as the name of the position you have applied for to: HR.Nattech@au.dk

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 Taxation 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 Taxation 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 37,000 students (FTEs) and 8.700 employees and has an annual revenue of EUR 1.106 billion. Learn more at www.international.au.dk/