Postdoc within development of electrodes for alkaline electrolysers

Are you interested in green energy, and do you want to contribute to the development of the future technologies for the green transition? At the Department of Biological & Chemical Engineering (BCE), Aarhus University we are executing a broad portfolio of projects within electrochemical energy conversion and storage technologies. Applications are invited for a 8 months postdoc position in the field of development of electrodes/catalysts for alkaline electrolysers.

Application Deadline:
28 April 2026

Institute/Faculty:
Department of Biological and Chemical Engineering

Faculty:
Faculty of Technical Sciences

Academic contact person:
Anders Bentien
Professor
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Vacant positions:
1

Number of months:
8

Hours per week:
37

Expected date of accession:
01/06/2026

Expected start date and duration of employment

This is a 8 month position from June 1, 2026 or as soon possible.

Job description

The position(s) are funded by several grants. Projects are related to development of electrode catalysts for alkaline water electrolysers and general performance improvement (separators, cell geometry etc). Besides fundamental developments, all projects include testing on kW scale.
Tasks include:
Synthesis & characterisation of novel redox active molecules

- Building up an experimental proof-of-concept for assessment of the basic working principles the technology
- Quantification of reaction rates and conversion efficiencies for different redox chemistries tested in proof-of-concept setup.
- Address and solve technical challenges related to upscaling of the technology
- Dissemination of results through both academic and non-academic channels
- Work in a team with external partners

Your profile

The applicant should have demonstrated excellence and have a relevant PhD degree in chemical or materials engineering, chemistry or similar. A general interest in technology application, societal challenges, and techno economics is a further qualification.

- Solid knowledge within electrochemical characterization
- Experience with chemical synthesis
- Experience with either electrolysers or flow batteries
- Experience with construction of experimental setups
- Good skills in communication of research results & publication experience
- Ability to work in a team - collaboration and/or management skills
- Ability to work independently

Who we are

Aarhus University, Department of Biological and Chemical Engineering (AU-BCE) encompasses some 200+ employees and five educations. Position is embedded in the section for Process & Materials Engineering, where the research focus is almost entirely on development of new sustainable solutions, materials and processes for the green transition. AU-BCE has strong competencies within all these technologies, associated process engineering and covers a large part of the TRL ladder. This includes basic research as well as activities within demonstration and pilot-scale testing of renewable energy technologies. Co-operation with other institutes, companies and universities both in Denmark and internationally is an integrated part of our culture.

What we offer

The department/centre offers:

- A well-developed research infrastructure, laboratories and access to shared equipment

- An exciting interdisciplinary environment with many national, international and industrial collaborators
- A work environment with close working relationships, networking and social activities
- Opportunities for career development

Place of work and area of employment

The place of work is Aabogade 40, 8200 Aarhus, Denmark, and the area of employment is Aarhus University with related departments.

Contact information

For further information, please contact: Prof. Anders Bentien, bentien@bce.au.dk, +45 30 36 95 15

Deadline

Applications must be received no later than April 28, 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/