

Postdoc in battery research for the Center for Sustainable Energy Materials

The Center for Sustainable Energy Materials at the Department of Chemistry, Aarhus University, is seeking a candidate for a 36 month postdoctoral position.

The position is available from the 1st of July 2025 or as soon as possible hereafter.

You will become a central member of the Center for Sustainable Energy Materials (CenseMat), which aims to create novel energy materials based on abundant elements through control of disorder in crystalline materials.

You will work on developing new sustainable materials for Li- and Na-ion batteries by exploring how structural disorder affects the material performance, and how disorder can be controlled during chemical synthesis. More specifically you will integrate:

- Advanced structural characterization mainly via e.g. XRD, PDF analysis, 3D Δ PDF, electron microscopy.
- Materials synthesis with insitu monitoring by X-ray scattering
- Electrochemical analysis of battery material performance
- Structural simulation in collaboration with partners at Oxford University.

You will of course write scientific papers for publication of the results in scientific journals, present your work at conferences, contribute to reporting on the project progress, proposal writing etc.

Furthermore, you will take part in project design, laboratory management decisions and co-supervision of master and bachelor students.

Your profile

- You have a strong background in inorganic or materials chemistry.
- You hold a PhD in chemistry / chemical engineering / materials science / physics or a related topic.
- You have demonstrated expertise in advanced structural characterization preferentially by X-ray diffraction or scattering.
- Preferably you have experience in either materials synthesis, crystallography, battery science, computational simulations or something similar.
- Preferably you have experience with synchrotron experiments.
- You possess excellent communication skills – both written and orally.
- You are a team player, who loves to pass on knowledge, guide and supervise, but also do not mind working independently
- You have a strong drive for scientific discoveries.

Who we are/ The department

The Department of Chemistry at Aarhus University (www.chem.au.dk) is one of the leading European chemistry departments with a broad research programs. It has a permanent staff of ~30 full and associate professors, a support-staff of ~30 people, ~150 PhD-students and postdocs and around 400 students.

The new Center for Sustainable Energy gathers four research groups at the Department of Chemistry and two partners at Oxford and Vienna University in a dynamic research environment where we value curiosity, pride in our work and team spirit. The center counts >60 members spanning from master students, PhD students and postdocs. The center resides in laboratories fully equipped for inorganic synthesis, battery fabrication, electrochemical analysis, structural and chemical characterization and physical property characterization. Specifically, you will join the group lead by Prof. Dorthe Ravnsbæk, which consists of about 15 researchers working on different aspects of battery science.

Application Deadline:
24 April 2025

Faculty:
Faculty of Natural Sciences

Institute/Faculty:
Department of Chemistry

Academic contact person:
Dorthe Ravnsbæk
Professor
dorthe@chem.au.dk
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Vacant positions:
1

Hours per week:
37

Number of months:
36

Expected date of accession:
01/07/2025

The place of work is Langelandsgade 140, 8000 Aarhus C, and the area of employment is Aarhus University with related departments.

Work and life in Aarhus

All interested candidates are encouraged to apply, regardless of their personal background. It is a priority that the successful candidate has a personality supporting positive team work. Working in Denmark offers opportunities for a good work-life balance. English is widely spoken, though Danish is the main language of campus. English is the working language.

Aarhus is Denmark's second largest city, and forms the center of the western parts of the country on the Jutland peninsula. Recently, Aarhus has attracted international attention as a travel destination due to its unique combination of a thriving food-scene, high-quality museums, a surrounding beautiful nature, a very lively city due to the "young population", many cultural events including music festivals etc. See e.g. the recent recommendation by CNN (<https://edition.cnn.com/travel/article/aarhus-denmark-things-to-do/index.html>).

Aarhus is easily reached through local international airports in Jutland within 1 hour of Aarhus, or through either Copenhagen or Hamburg Airports, both situated about a 3-hour train-journey from Aarhus.

Aarhus University is consistently ranked as a top-100 university in the World and it houses both an engineering and a medical school, as well as the traditional sciences, social sciences, environmental and agricultural sciences and arts.

For further information please contact: Dorthe Ravnsbæk, dorthe@chem.au.dk, +4593522528.

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.

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

Natural 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](#).

At the Faculty of Natural Science at Aarhus University, we strive to support our scientific staff in their career development. We focus on competency development and career clarification and want to make your opportunities transparent. On [our website](#), you can find information on all types of scientific positions, as well as the entry criteria we use when assessing candidates. You can also read more about how we can assist you in your career planning and development.

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 8,300 employees, and has an annual revenues of EUR 935 million. Learn more at www.international.au.dk/