Research Assistant for valorisation of side stream press cake from green biorefinery for textiles

We are seeking a Research Assistant for a 6 months position in the Green Biorefining Technologies research group to further optimize our methods of valorisation of the fiber-rich press cake side stream from the green biorefinery demoplant at AU Viborg. The project will focus on pulping of the press cake and development of textile filaments from the refined cellulose-fraction.

Application Deadline:
06 February 2026

Institute/Faculty:
Department of Biological and Chemical Engineering

Faculty:
Faculty of Technical Sciences

Academic contact person:
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Vacant positions:
1

Number of months:
6

Hours per week:
37

Expected date of accession:
01/03/2026

Expected start date and duration of employment

This is a fixed-term position to start at 1st of March 2026 or as soon as possible thereafter.

Job description

The position includes both current and future-oriented research tasks, including but not limited to:

- Experimental work related to processing press cake and derived polymers into textile filaments
- Preparation, handling, and characterization of polymerbased and bio-based materials
- Operation and maintenance of relevant laboratory and pilotscale equipment
- Use of analytical techniques for material characterization (e.g. thermal, mechanical, rheological, or chemical analysis)
- Data collection, documentation, and basic data analysis
- Contribution to reporting, presentations, and potentially scientific publications
- Supporting collaboration within the research group and with external partners when relevant

Over time, the role may develop to include increased responsibility for planning experimental work and contributing to method development.

The Research Assistant is expected to:

- Carry out assigned research tasks independently and in coordination with project leaders
- Ensure structured, reproducible, and welldocumented experimental work
- Follow laboratory safety procedures and quality standards
- Take responsibility for own tasks and deadlines within agreed project frameworks

The position does not include formal staff responsibility but requires a high degree of professional responsibility and reliability.

Your profile

Applicants are expected to have:

- A Master’s degree (MSc) in Chemical Engineering, Biotechnology, Materials Science, Polymer Science, or a closely related field
- Basic knowledge of polymer science and polymer processing
- Experience with relevant analytical equipment and laboratory techniques
- Familiarity with experimental research work, preferably within materials, biorefining, or related areas
- Good IT skills and experience with data handling and documentation
- Proficiency in written and spoken English

Experience with textile materials, filament spinning, or bio-based materials is considered an advantage but not a requirement.

The successful candidate is expected to:

- Be able to work independently, systematically, and in a structured manner
- Demonstrate strong analytical skills and attention to detail
- Be motivated, curious, and eager to learn new methods and techniques
- Work well both independently and as part of an interdisciplinary research team
- Communicate clearly and constructively with colleagues and supervisors
- Contribute positively to a collaborative, respectful, and international research environment

Who we are

The Department of Biological and Chemical Engineering offers a dynamic research environment with close collaboration between researchers, students, and external partners, and a strong focus on sustainability and applied research.

What we offer

The Green Biorefining Technologies research group focuses on the development of sustainable biorefining processes that enable high-value utilization of green biomass. A key strategic goal of the group is to contribute to the transition towards a circular bioeconomy by converting residual biomass streams into value-added products.
The Research Assistant will contribute to research activities related to the conversion of press cake from green biorefining processes into textile filaments. The position supports ongoing research projects by performing experimental work, material processing, and analytical characterization, thereby contributing to the development of novel bio-based textile materials and processes.

Place of work and area of employment

The position includes two permanent workplace addresses in Aarhus and AU Viborg respectively. The attendance at each workplace address is by agreement with your immediate supervisor. At the time of employment, the distribution between the workplace addresses is expected to be approximately 4 days a week with place of employment in Aarhus and 1 day a week with place of employment in Foulum. In Aarhus the place of work is Hangøvej 2, 8200 Aarhus N. In Foulum the place of work is Blichers Allé 20, 8830 Tjele. The area of employment is Aarhus University with affiliated institutions.

Contact information

For further information, please contact: Morten Ambye-Jensen, +45 93 50 80 09, maj@bce.au.dk.

Deadline

Applications must be received no later than 6 February 2026.

Place of work

The place of work is Hangøvej 2 , 8000 Aarhus C, and the area of employment is Aarhus University with related departments.

Application procedure

Short-listing is used. This means that after the deadline for applications – and with the assistance from the assessment committee chairman, and the assessment committee if necessary, – the head of department selects the candidates to be evaluated. The selection is made on the basis of an assessment of who of the candidates are most relevant considering the requirements of the advertisement. All applicants will be notified within 6 weeks 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 will receive his/her assessment. 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.

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/