

Postdoctoral position in crop physiology and biochemistry

The Department of Food Science, Aarhus University (Denmark), invites highly talented and motivated candidates to apply for a 36-month postdoc position in crop physiology and biochemistry. The starting date is 1st March 2026, or subject to mutual agreement.

The research project

This postdoc position is part of a Novo Nordisk funded project that aims to uncover how the regulation of photosynthesis and sugar transport and accumulation— particularly via the key enzyme Rubisco—is affected by drought and heat stress in sweet potato, a vital but under-researched staple crop for nutrition in many developing countries, and a potential for a new future crop in Scandinavia. Using sweet potato as a physiological model, the research will identify key metabolic bottlenecks in the plant's source-sink relationship (leaf to storage root sugar allocation) that limit yield under climate stress. Through advanced physiological, biochemical, and omics approaches, the project will reveal how to maintain or even enhance yield stability under future climate scenarios using a panel of genotypes. Although sweet potato is the model, the findings will provide a fundamental framework applicable to major food crops such as potato and tomato, contributing broadly to more climate-resilient agriculture.

Qualifications

- PhD degree in Plant Science or related discipline
- Expertise in gas exchange and chlorophyll fluorescence measurements
- A good understanding of advanced physiological techniques
- Experience with enzymatic in vitro assays and plant x climate interactions
- Experience in complex data handling and statistical analysis
- Publication records in international peer-reviewed journals relative to career stage
- Excellent written and spoken English communication skills
- Experience with collaborative, cross-cultural research environments
- Proactive with a high degree of initiative, enthusiasm and positive attitude
- Ability to carry out research independently in the laboratory and greenhouse; evidence of working effectively and collaboratively within a team, providing appropriate support and guidance to colleagues
- Attention to detail, good organisational skills, excellent record-keeping; accuracy in documenting research
- Experience in supervising students and teaching

Following qualifications will be considered as an advantage:

- Experience with metabolomics analysis
- Experience of measuring Rubisco activity in vitro and western blotting

Candidates who partially meet this profile are nonetheless encouraged to apply. Candidates are not required to speak Danish.

The Department of Food Science

Research will be conducted at a newly built 7000 m² state-of-the-art research facility including greenhouses and controlled environments and physiological labs at the Department of Food Science, Aarhus University (AU FOOD). AU FOOD is in possession of the most advanced analytical research infrastructure, with well-integrated, high-tech prototype facilities. The position is aligned to the Science Team of Plant, Food & Sustainability. Current research is focused on field- and controlled environment grown horticultural crop physiology and quality, cropping systems and management practices, including plant growth and soil health, fertilisation strategies, peat replacement, use of Application Deadline: Jan 1, 2026 Faculty: Faculty of Technical Sciences Institute/Faculty: Department of Food Science Academic contact person: Ana Lobo Vacant positions: 1 Hours per week: 37 Number of months: 36 Expected date of accession: 1st March 2026 Side 2 af 3 compost and cover crops,

Application Deadline:
05 January 2026

Institute/Faculty:
Department of Food Science

Faculty:
Faculty of Technical Sciences

Academic contact person:
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Vacant positions:
1

Number of months:
36

Hours per week:
37

Expected date of accession:
01/03/2026

including conventional and organic farming, using measures such as root growth, nutrient use efficiency and soil enzyme activity. Sustainable fruit, vegetable and legume production is in focus, and phenotyping and stress physiology. The Department currently employs approx. 140 full time scientific staff including PhD students and Postdocs. In addition, approx. 80 thesis-based Bachelor and Master students, visiting staff and students join us every year, together contributing to an international research environment where English is the main language in the laboratory, at meetings and at seminars. Read more about the Department of Food Science at www.food.au.dk.

Place of work

The place of work is the Department of Food Science, Aarhus University, Agro Food Park 48, 8200 Aarhus N (Denmark).

Contact information

For further information about the project or the position, please contact the principal investigator Ana Lobo (alobo@food.au.dk)

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/