Assistant Professor (Tenure Track) position in Catchment-Scale Hydrologic Modelling

Application Deadline:
01 June 2026

Institute/Faculty:
Department of Ecoscience

Faculty:
Faculty of Technical Sciences

Academic contact person:
Katrin Bieger
Forsker
katrin.bieger@ecos.au.dk

Vacant positions:
1

Hours per week:
37

Expected date of accession:
01/10/2026

The Department of Ecoscience invites applications for a tenure track position as assistant professor in catchment-scale hydrological modelling. The position aims to strengthen and complement the Department's ongoing activities in catchment-scale modelling of nutrient and contaminant transport in agricultural systems.

Expected start date and duration of employment

Expected start is 1st of October 2026 or as soon as possible hereafter.

Job description

You will be part of the Aarhus University SWAT (Soil and Water Assessment Tool) modelling group. We are seeking a highly motivated researcher to advance next-generation modelling approaches at the interface of agriculture, hydrology, ecology, and socio-environmental systems. You will contribute to the development of integrated assessment frameworks that support sustainable land-use transitions and climate adaptation at local, regional, and national scales.
The position involves modelling agricultural production and land-management dynamics and their impacts on water quantity and quality under changing environmental and socio-economic conditions, focusing on phenological development and crop yields under climate variability and future scenarios (e.g., agro-forestry systems and other management interventions), and integrating SWAT+ outputs with life-cycle assessment modules. Furthermore, to enhance the group's capacity to capture land to sea connectivity, you will help build tighter linkages between SWAT+ and downstream aquatic models that assess the impacts of pollutant loads on marine ecology, water quality, and ecosystem services.
You will be expected to publish your research in peer-reviewed scientific journals and technical reports, write research proposals for external funding, and supervise MSc and PhD students. Where required, you will apply your research findings to contribute to the Department's science-based policy support activities for the Danish government. You will collaborate closely with researchers from the Section for Freshwater Ecology, especially the Computational Limnology group and the Nature-Based Solutions Center (C-NBS) while developing an independent research profile.

Your profile

We are searching for a highly motivated candidate who has:

- A PhD in hydrology, environmental engineering, environmental science, geography, ecology, or a related field
- Strong experience in hydrological modelling
- Proficiency in R and/or Python
- Experience with GIS and remote sensing
- Ability to work with large and heterogeneous datasets
- Experience with scientific writing
- Excellent written and spoken English

Further, we will give preference to candidates with some of the following qualifications:

- Knowledge of crop and plant growth processes and modelling
- Familiarity with Danish agricultural systems
- Experience in science-based advice
- Experience in supervision of BSc, MSc and/or PhD students
- Co-simulation between ecohydrological and life cycle assessment models

Personal qualifications include the ability to collaborate effectively within interdisciplinary research teams, to engage with external stakeholders and end users, and to contribute positively to a collaborative research environment. Teamwork and cross-disciplinary research are key elements within the Department.

Who we are

The successful candidate will be integrated into the Section for Catchment Science and Environmental Management at the Department of Ecoscience. Research and advisory activities in the Department are largely project-based, with a strong tradition for interdisciplinary research and international collaboration.

The Department of Ecoscience is engaged in research programs and advisory work covering the major biological sub-disciplines. We conduct innovative, advanced research in the areas of aquatic biology and ecology, Arctic environments and ecosystems, biodiversity, conservation biology, and wildlife management. The Department currently employs approximately 300 academic and technical staff, as well as many PhD students.
The qualified candidate will work in a supportive and internationally engaged scientific environment at the Section for Freshwater Ecology. The department aims to be a supportive and encouraging workplace that offers interesting challenges, collaborative colleagues, and avenues for academic growth. The department actively facilitates a healthy integration of work and personal life and aspires to recruit and maintain highly skilled individuals who prioritise curiosity and trust.

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

Place of work and area of employment

The main place of work will be on the main campus of Aarhus University, C.F. Møllers Allé 3, 8000 Aarhus, Denmark.

Contact information

For further information you may contact Associate Professor Katrin Bieger, +45 93521685; katrin.bieger@ecos.au.dk

Deadline

Applications must be received no later than 1.6.2026.

Technical Sciences Tenure Track

Aarhus University offers talented scientists from around the world attractive career perspectives via the Technical Sciences Tenure Track Programme. Highly qualified candidates are appointed as Assistant Professors for a period of six years with the prospect of performance- based advancement to a tenured Associate Professorship.

The aim of the Technical Sciences Tenure Track Programme is to:

- attract outstanding talented individuals that are competitive at an international level
- to promote the early development of independent research success early in the career of scientists
- to create transparency in the academic career path

As part of the tenure track position, the candidate is offered:

- access to research infrastructure
- capability development, including postgraduate teacher training

- a mentoring programme
- support to develop scientific networks and to secure interdisciplinary research at the highest level

As part of the Aarhus University Tenure Track Programme, the University carries out a mid-way evaluation to review the progress of the tenure track candidate after three years, according to the same criteria used in the final tenure review. The final tenure review is conducted after five and a half years. If the review is positive, the candidate will be offered a tenured position as Associate Professor at Aarhus University.

Please refer to the tenure track guidelines for the tenure review criteria and for the tenure review process.

Application procedure

Shortlisting 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.

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.

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/