

Post Doc position in Catchment-Scale Hydrologic Modelling

A 2-year position as Postdoctoral Researcher within the field of Catchment-Scale Hydrologic Modelling is available at the Department of Ecoscience, Aarhus University. The position aims to strengthen and complement the Department's ongoing activities in catchment-scale modelling of nutrient and contaminant transport.

Expected start date and duration of employment

The expected start date is 1st of September 2026, or as soon as possible thereafter.

Job description

You will be part of the Aarhus University SWAT (Soil and Water Assessment Tool) modelling group. You will be contributing to establishing SWAT+ as a recognized tool for research and science-based advice in the context of hydrological process and pollutant transport modelling in Denmark and beyond. Specifically, your work will focus on two key areas of research: (1) coupling existing SWAT+ models for selected catchments in Denmark with MODFLOW to improve the simulation of groundwater flow and pollutant transport and (2) enhancing the representation of contaminant fate and transport processes (e.g., pharmaceuticals, PFAS) in SWAT+. Where required, you will apply your research findings to contribute to the Department's science-based policy support activities for the Danish government.

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 hydrogeology and groundwater – surface water interactions
- Experience in groundwater modelling
- Experience in modelling contaminant fate and transport
- Familiarity with Fortran

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.

Application Deadline:
01 June 2026

Institute/Faculty:
Administrations centre
Nat-Tech

Faculty:
Science and
Technology

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

Vacant positions:
1

Number of months:
24

Hours per week:
37

Expected date of accession:
01/09/2026

What we offer

The department 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 for the postdoctoral researcher 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

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/