

# Postdoc in developing ventilation techniques to mitigate emissions from animal production facilities and assessment of animal heat stress

Applications are invited for a one-year postdoc position in the field of building ventilation at the Department of Civil and Architectural Engineering, Aarhus University, Denmark.

## Expected start date and duration of employment

This is a one-year position from 15 August 2026 or as soon possible.

## Job description

The appointed candidate is expected to develop ventilation techniques to mitigate emissions from animal production facility and contribute to the development of dynamical models for assessing the thermal status of animals. The candidate will contribute to the development of the research group and help supervise PhD students and research assistant. You will work closely with group members, project partners, and colleagues across sections at our department. Your main tasks will consist of:

- Designing scenarios of CFD modelling for ventilation development.
- Developing and applying dynamical models to assess animal thermal status.
- Communicating with project partners.
- Writing reports and manuscript for submitting to international journals.

The position can be extended based on the performance of the candidate.

## Your profile

The candidate is expected to have a PhD degree or near completion of the PhD study (for Postdoc position) in Mechanical engineering, Building Science engineering, Agricultural engineering or similar domain. The candidate is expected to:

- Prove a thorough knowledge of building ventilation systems and heat and mass transfer.
- Demonstrate experience in CFD (Computational Fluid Dynamics) modelling for building ventilation and external flow.
- Have experience or interest in dynamical systems modelling based on data driven approaches.
- Communicate well with different stakeholders.
- Excellent oral and writing skills in English.
- Be willing to contribute to a good work environment.

Desirable requirements:

- Basic knowledge of animal welfare.
- Experience with programming (e.g. Python, R, MATLAB, or similar).
- Driving license.

## Who we are

Department of Civil and Architectural Engineering was established on January 1, 2021, in connection with Aarhus University's reorganization of the engineering area. The department employs around 100 people and is responsible for research and education within the department's scientific areas. We educate both Bachelors and Masters of Science in Engineering and around 950 students are enrolled in our study programs. Furthermore, we also offer an ambitious PhD program. Our PhD students have high academic ambitions and deliver high-quality results for both the private and the public sectors.

Through research and development, we forge sustainable technological solutions to some of the biggest challenges facing industry and society. We strive to contribute to sustainable development and to create green solutions to challenges within construction, indoor climate, geotechnics, environmental and climate adaptation

**Application Deadline:**  
26 May 2026

**Institute/Faculty:**  
Department of Civil and Architectural Engineering

**Faculty:**  
Faculty of Technical Sciences

**Academic contact person:**  
Li Rong  
Lektor, sektionsleder  
+4593508390  
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**Vacant positions:**  
1

**Number of months:**  
12

**Hours per week:**  
37

**Expected date of accession:**  
15/08/2026

and many other areas.

Our research is both basic and applied, and we develop current knowledge into workable solutions in the business community. We collaborate with a wide range of public and private enterprises, and many of the department's research and development activities are based on the innovation needs of the business community. Through collaboration, we ensure that the knowledge and technology generated in the university's technical research environments are clearly anchored in reality and benefit the surrounding society. Based on our research on building materials, architectural design and technology, we also offer research-based public sector services and consultancy on technology to public agencies and ministries.

### **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 place of work is at Navitas at Inge Lehmanns Gade 10, DK-8000 Aarhus C, Denmark and the area of employment is Aarhus University with related departments.

### **Contact information**

For further information, please contact: Associate Professor, Li Rong, +45 93508390, [li.rong@cae.au.dk](mailto:li.rong@cae.au.dk).

### **Deadline**

Applications must be received no later than 26 May 2026.

### **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](mailto: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/](http://www.international.au.dk/)*