

Tenure-track Assistant / Associate Professor in the field of “CO2 capture or conversion”

The Department of Mechanical and Production Engineering (MPE) at Aarhus University is expanding its research and teaching activities in the field of “CO2 capture or conversion” and invites applications for Tenure-track Assistant / Associate Professor position within the Section of “Fluids and Energy”.

The MPE Department seeks an innovative and visionary engineer/researcher capable of establishing an internationally recognized research group and delivering research-based teaching at the Bachelor, Master & PhD levels. The successful candidate is expected to establish strong and visible research programs, develop strong local and international research collaborations, successfully attract external funding, and contribute to our mechanical engineering bachelor and master programs with teaching at an international level.

For this open position, we are seeking candidates with experience in the following area:

- CO2 capture or conversion technologies focusing on topics such as mass and heat transfer, flow optimization, and system integration for demonstration of new concepts. The candidate is expected to contribute to teaching Bachelor and Master level courses on Thermodynamics, Fluid Mechanics, and Heat and mass transfer.

The candidate should mention in the application the area to which she/he is applying and the position (either tenure-track Assistant Professor, or Associate Professor).

We specifically encourage candidates with an interdisciplinary research profile that can strengthen our strategic research activities within Green transition, Digitalization, and Health in the MPE Department and the University. Candidates that can demonstrate the potential for industrial application of their research will have a significant advantage.

We encourage applicants to consider potential synergies with our existing research and educational program.

Expected start date

01.05.2025 or as soon as possible hereafter.

The engineering field in Aarhus University is changing with a rapid growth in student population, major research initiatives as well as through the establishment of a number of new physical facilities in the city center of Aarhus. We have ambitious plans for increasing activities in research, education as well as public and industrial cooperation. The Mechanical and Production Engineering Department within the Faculty of Technical Sciences has cooperation with universities and advisory service providers in more than 20 countries.

The candidate is required to teach relevant courses (e.g. Thermodynamics, Fluid mechanics, Heat transfer) in the MPE educational program, and the candidate is encouraged to establish new, specialized courses within the area of “Thermo-Fluids and Energy Systems” at the B.Sc., M.Sc., and/or PhD levels of the Mechanical and Production Engineering program.

To be successful in this role, we expect the candidate to fulfill the following requirements:

The position can be either as Tenure-track Assistant professor or as Associate professor. Additional requirements for applicants at the Associate level are mentioned in () below.

- A PhD or equivalent in Mechanical Engineering or in a relevant subject area.
- A strong research track record and high-quality publications in peer reviewed

Application Deadline:
28 November 2024

Faculty:
Faculty of Technical Sciences

Institute/Faculty:
Department of Mechanical and Production Engineering

Academic contact person:
Mahdi Abkar
Sektionsleder for Fluid og Energi, lektor
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+4593521694

Vacant positions:
1

Hours per week:
37

Expected date of accession:
01/05/2025

journals.

- Demonstrate leadership in establishing an internationally competitive research group. (Applicants for the Associate Professor Position, should have experience in supervision of PhD students and/or postdoctoral research.)
- Compete for national and international research grants and make important research contributions. (Applicants for the Associate Professor Position should demonstrate a track record of attracting research funding from government and/or private sources.)
- Excel in both teaching and research. (Applicants for the Associate Professor Position, should have experience in teaching Bachelors and/or Masters-level courses relevant to Mechanical and Production Engineering.)
- Establish strong industrial R&D cooperation. Prior experience in establishing industry collaborations is desirable.
- Bring research results into the public domain. The candidates should have strong communication skills in English. It is a clear advantage if the candidates have the ability or are willing to develop their communication skills in Danish.

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The MPE Department is part of the Novo Nordisk Foundation CO2 Research Center (CORC), which entails significant potential for collaboration.

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 employment and place of work

The place of employment is Aarhus University, and the place of work is Science and Technology, Katrinebjergvej 89, DK-8200 Aarhus N, Denmark.

Further information

For more information about the position contact Head of Department, Anders Brandt (abra@mpe.au.dk / +45 2912 5815) or Head of Section Mahdi Abkar (abkar@mpe.au.dk / +45 9352 1694).

Application deadline: 28.11.2024.

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. 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.

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.

Ensuring gender balance at the Department of Mechanical and Production Engineering is a high priority at Aarhus University, and therefore, we particularly encourage women to apply for this position. No candidate will be given preferential treatment, and all applicants will be assessed on the basis of their qualifications for the position in question.

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 38,000 students (FTEs) and 8,300 employees, and has an annual revenues of EUR 935 million. Learn more at www.international.au.dk/