

# Two Tenure-track Assistant / Associate Professor Positions in the field of Mechatronics, Robotics, and System Dynamics

The Department of Mechanical and Production Engineering (MPE) at Aarhus University is expanding its research and teaching activities in the field of "Mechatronics, Robotics, and System Dynamics" and invites applications for two Tenure-track Assistant / Associate Professor position within the Section of "Mechatronics, Robotics, and System Dynamics".

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 Bachelors, Masters & 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 these two open positions, we are seeking candidates within the broad area of Mechatronics, Robotics, and System Dynamics. Preference will be given to applicants with experience in one or more of the following topics:

- Mechanical System dynamics: modelling, identification, and real-time control
- Flexible robotic cells: design, automation, and control
- Mobile robots: unmanned ground vehicles, autonomous underwater vehicles, and unmanned aerial vehicles
- Soft and bio-inspired robotic systems

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 and the experience and skills of artificial intelligence (e.g. machine learning) with applications to the above topics will have a significant advantage.

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

## Expected start date

July 1, 2022 or January 1, 2023.

The candidate is required to have capabilities of teaching relevant courses (mechatronics, mechanical vibrations, electronics, control theory, computational dynamics, robotics, etc.) in the MPE educational program. In addition, the candidate should be capable of developing new, specialized courses within the area of "Mechatronics, Robotics, and System Dynamics" at the B.Sc., M.Sc., and/or PhD levels of the Mechanical and Production Engineering program.

The candidate is expected to carry out research on an international level in relevant areas for mechanical and production engineering.

## 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 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 journals.
- Demonstrate leadership in establishing an internationally competitive research group. Applicants for the Associate Professor Position, should have experience in

**Application Deadline:**  
19 April 2022

**Faculty:**  
Faculty of Technical Sciences

**Institute/Faculty:**  
Department of Mechanical and Production Engineering

**Academic contact person:**  
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**Vacant positions:**  
2

**Hours per week:**  
37

**Expected date of accession:**  
01/07/2022

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, and be able to document pedagogical training.
- 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.

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 on increased 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 engineering field at Aarhus University is well established with extensive research activities, approximately 700 mechanical engineering students and a long tradition of industrial cooperation that we wish to extend significantly.

#### **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 Faculty of Technical Sciences, Department of Mechanical and Production Engineering, Inge Lehmanns Gade 10, DK-8000 Aarhus C, Denmark.

#### **Further information**

For more information about the position contact Head of Department, Anders Brandt ([abra@mpe.au.dk](mailto:abra@mpe.au.dk) / +45 2912 5815) or Head of Section Xuping Zhang ([xuzh@mpe.au.dk](mailto:xuzh@mpe.au.dk) / +45 41893167).

#### **Application deadline**

April 19, 2022.

#### **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 Finance 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 Finance 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 8,000 employees, and has an annual revenues of EUR 885 million. Learn more at [www.international.au.dk/](http://www.international.au.dk/)*