Assistant Professor in Electrical Energy Technology, Department of Electrical and Computer Engineering, Aarhus University

Application Deadline:
31 October 2025

Faculty:
Faculty of Technical Sciences

Institute/Faculty:
Department of Electrical and Computer Engineering

Academic contact person:
Björn Andresen
Professor
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Vacant positions:
1

Hours per week:
37

Number of months:
48

Expected date of accession:
01/02/2026

Aarhus University has made an ambitious strategic investment in a 2025-year recruitment plan to increase its activities significantly within research and education in the engineering sciences with the vision of bringing AU into the global engineering elite. As of 1 January 2021, ECE become a department within the Faculty of Technical Sciences with a focus on strengthening the growth strategy and focusing on the strategic goal of becoming the “Green” Faculty. Therefore, the University seeks exceptional, innovative and visionary engineering researchers to be part of this build-up to strengthen and develop ECE at Aarhus University.

The announced position will support the strategic agenda of the university by extending the competencies in ECE within the Electrical Energy Technology section, including renewable power generation, energy system control, drives systems, power electronics, power engineering, system integration, transmission, distribution & storage systems, energy efficiency, energy policies, markets and operations, including sector coupling.

The Sections focus on the energy system integration and energy transition of the future energy system, including coordinated planning and operation of the energy system across multiple energy systems, renewable energy production, infrastructures and consumption for a more efficient, circular and reliable future energy system.

The position is open from February 1st or shortly thereafter and is a 4 year fixed term contract.

Job description

Electricity is the key to the future decarbonizing society, but the challenges are huge. It took around 130 years to get to where we are today, and now we have less than 15 years not only to replace the existing system but also to replace it with variable energy resources, demand side response, electrification of transport sector, challenging energy markets, and rapid growth in electrical energy consumption.

The stable operation of the electrical energy systems is essential for modern society. With the ongoing transformation of the electrical energy system, including the integration of power converter-driven technology and the transition towards a more integrated energy system, we seek highly qualified and ambitious candidates to build and develop their research area.

Applicant profile

We are seeking highly motivated candidates for an **Assistant Professor position** within **electrical power system integration and energy conversion**, with a particular emphasis on the **grid integration of Power-to-X (PtX) technologies**.

The ideal candidate will have a strong background and proven research track record in one or more of the following areas:

- **Grid integration of energy storage systems & PtX systems** including electrolysis, hydrogen production, and synthetic fuels.
- **Power converter technologies** for e.g. PtX applications such as grid-forming converters, high-power rectifiers for electrolysis, and advanced control of converter-dominated systems.
- **Modeling, control, and optimization of consumer systems and their interaction with the power grid** to ensure efficiency, stability, and compliance with grid codes.
- **Modern power system operation and control**, including distributed and transmission-level integration of renewable energy and PtX processes.
- **Hybrid power plants** with PtX components and their role in providing grid services, flexibility, and stability.

The research area at Aarhus University is relatively new. Therefore, you must have a

strong network in your research area, be entrepreneurial, think out of the box, be good at seeing development opportunities, enjoy being at the cutting edge of new technologies and effectively translate your knowledge into robust solutions for society.

The position will be anchored in the EET section under the ECE department. The candidate is expected to attract and lead research activities, work closely with other researchers/groups within the department as well as with external stakeholders,

Teaching Profile

The successful candidate will contribute actively to teaching and supervision at both BEng, BSc and MSc levels by:
Developing and teaching courses in power electronics for PtX, converter control, grid integration of renewable energy and PtX systems, and modern power system operation.
Supervising student projects and theses, particularly within converter technologies, electrolysis integration, and power system stability.

Successful candidates should have a PhD in electrical engineering or a closely related field. The candidates must have excellent written and verbal communication skills and be proficient in written and spoken Danish or demonstrate a willingness to learn Danish within 3-4 years. Relevant industrial R&D experience is an asset.

About the Department of Electrical and Computer Engineering, Aarhus University

The Department of Electrical and Computer Engineering is one of four engineering departments at the Faculty of Technical Sciences at Aarhus University.

Our vision is to be a world-leading department for research, education and innovation in electrical and computer engineering, creating a positive and visible impact on society and the environment through interdisciplinary collaboration, excellence and diversity.

Our research and development activities are based on specific innovation needs or application areas for local companies. We collaborate closely with the public sector and private companies to ensure that the knowledge and technology generated in the department's research environment have a clear anchoring in reality and benefit society as a whole.

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

For more information about the Department of Electrical and Computer Engineering, please visit https://ece.au.dk/.

Visit our LinkedIn: https://www.linkedin.com/company/au-ece/

Research areas in the department

Electrical and computer engineering are closely related technical science disciplines focusing on research into hardware and software technologies. We focus on research and development activities in the fields of communication and networks, control and automation, photonics, signal processing, software and IT systems, robot technology, medical technology, health technology, electrical energy technology, and acoustics and sound technology.
The department wishes to build a research and study environment with equality and diversity as a core value for recruitment as well as for daily study and work life.

Visit our Job and Career webpage to discover more about ECE.

The benefits of working in Denmark

Denmark as a country offers the opportunity to pursue a career without compromising your family life, and in general, the work-life balance in Denmark is among the best in Europe. In addition, Denmark is a safe place to live, has a very low crime rate, and is generally secure and equal. The Danish society builds on a welfare system, which means your taxes go into welfare services such as free healthcare and education. Taxes in Denmark are high, but international academic staff members can, under certain conditions, benefit from a special tax scheme to improve working conditions further. In addition, collective agreements guarantee you a safe workplace, fair wages, pay during sickness, paid paternity/-maternity leave, flexible work hours and much more.

If you want to know more about the Danish way of life, please visit: Life in Denmark.
You can also contact our International Staff Office.

Place of work and area of employment

The place of work is Finlandsgade 22, 8200 Aarhus N, where the department and the laboratories are located.
The electrical energy technology section is currently undergoing a rapid expansion concerning both educational and research activities, including three large EU projects. Besides this, the department is the biggest education place in Denmark for the electrical power engineering area at the Bachelor level.
The department has as well established the RESCUE laboratory - http://www.rescuelab.au.dk/ - which is used by researchers, students and companies. The main goal of the laboratory is to gain experimental experience in future energy systems based on the full integration of renewable energy sources such as solar, wind, biogas, and storage systems.
The department has furthermore expanded its activities to the Herning Campus of Aarhus University and has also established the first “Online” education for Electrical Energy technology.

Contact information

Further information about the position may be obtained from the Section Head for the Electrical Energy Technology Area, Björn Andresen (bjra@ece.au.dk)

Deadline

Applications must be received no later than October 31, 2025.

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.

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.

Ensuring gender balance at the Department of Electrical and Computer 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