

## **Professor (with special responsibilities) in Renewable-based Power Systems**

DTU Electrical Engineering at Technical University of Denmark invites applications for a position as Professor (with special responsibilities) in Renewable-based Power Systems.

The successful candidate will join our Center for Electric Power and Energy (CEE) that has received increased recognition internationally for its contribution to both new theoretical concepts and application-related solutions of modern power system engineering. A key area of focus is on integration of high shares of variable renewable power production while maintaining an affordable and reliable energy system.

Your research field shall be on one or more topics within the area of renewable-based power systems and their modelling and control. The topics can be for example large-scale wind power integration, optimal operation of power systems with renewables (congestion management, voltage control, etc.), application of data-driven methods for power system operation, integration of power systems with various other energy infrastructures (heating, gas, mobility etc.), or other relevant topic.

### **Responsibilities and tasks**

CEE strives for academic excellence in research, education, and innovation within electric power and energy, and as a professor, you are expected to contribute to our common goals through your activities and in close and rich collaboration with your colleagues at the centre.

Your tasks include developing a visible and internationally recognized research programme within your research topic related to renewable-based power systems. You will develop cutting-edge research plans, secure major external funding for your ideas, and carry out successful research projects to realize your plans.

Your research will contribute to CEE's overall research aim, namely the development of new knowledge and solutions, which enable the most integrated, marked-based, and flexible energy system based on digital technologies and renewables in a reliable and affordable manner. Specifically, your research will contribute to the three overarching research themes of the centre: 1) Digital energy solutions, 2) Interconnected energy system and 3) Optimized electric energy technologies.

You will contribute to an attractive teaching programme and must be committed to excellence in education, as well as promote, execute and apply modern teaching methods.

As an integrated part of your work, you are expected to build-up a close and confident collaboration with colleagues at DTU, and thereby benefitting from DTU's stronghold position within energy research and activities within for instance electricity markets, smart grids, wind energy, artificial intelligence etc. We expect you to have the ability to motivate your colleagues to be their best and achieve ambitious goals. Additionally, you will contribute to strengthen CEE's international academic network and developing our strategic partnerships with the industry.

The professor is expected to participate in teaching at the BSc, MSc and PhD levels. For international candidates, DTU can provide Danish language courses enabling the candidates to teach in Danish within 2-3 years.

### **Qualifications**

You have the ability to take leadership and build up an outstanding research programme within one or more topics as described above. This implies an excellent record of accomplishments in terms of original scientific production at international level.

You have potential to contribute to innovation and entrepreneurship, and you have documented research management skills, including developing and realizing research plans, building collaborations, attracting funding, and successfully managing research projects.

In addition, you have good dissemination skills and commitment to teaching. You can document formal didactic training and you have experience in development of courses and preferably also educational programs.

Important personal qualities for the position are:

- You are driven by pushing boundaries
- You thrive on collaboration and teamwork
- You are focused on the process as well as the outcome

### **Assessment**

In the assessment of the candidates, consideration will be given to:

- Documented experience and quality of teaching and curriculum development
- Research impact and experience, funding track record, and research vision
- Societal impact
- Documented innovation activities, including commercialization and collaboration with industry
- International impact and experience
- Leadership and collaboration
- Communication skills

### **We offer**

DTU is a leading technical university globally recognized for the excellence of its research, education, innovation and scientific advice. We offer a rewarding and challenging job in an international environment. We strive for academic excellence in an environment characterized by collegial respect and academic freedom tempered by responsibility.

### **Salary and appointment terms**

The appointment will be based on the collective agreement with the Danish Confederation of Professional Associations. The allowance will be agreed upon with the relevant union.

The position is available for a 5-year period and may be extended for up to 3 additional years. At the end of the period, the employee in question will transfer to a position as associate professor at the university. More information can be found here: [Career paths at DTU](#).

### **Further information**

Further information may be obtained from Head of Department Kristian Stubkjær, tel.: +45 4525 3645 or Head of Centre Jacob Østergaard, tel.: +45 4525 3501.

You can read more about Center for Electric Power and Energy on [www.cee.elektro.dtu.dk](http://www.cee.elektro.dtu.dk) and Department of Electrical Engineering on [www.elektro.dtu.dk](http://www.elektro.dtu.dk).

### **Application procedure**

Please submit your online application no later than **XXX 2018 (local time)**. Apply online at [www.career.dtu.dk](http://www.career.dtu.dk).

Applications must be submitted as **one PDF file** containing all materials to be given consideration. To apply, please open the link 'Apply online', fill out the online application form, and attach **all your materials in English in one PDF file**. The file must include:

- Application (cover letter) addressed to the President
- CV
- A vision for future research
- Teaching and research statement, with a focus on the 'Assessment' bullet points listed above
- Documentation of previous teaching and research, as related to the 'Assessment' bullet points listed above
- List of publications indicating scientific highlights
- H-index, and ORCID (see e.g. <http://orcid.org/>)
- Diploma (MSc/PhD)

Applications and enclosures received after the deadline will not be considered.

The University wishes our staff to reflect the diversity of society and thus welcomes applications from all qualified candidates regardless of personal background.