

Professor in Electric Power Equipment Technology

DTU Electrical Engineering at the Technical University of Denmark invites applications for a position as Professor in Electric Power Equipment Technology.

The professor will be attached to our Center for Electric Power and Energy. The professor will lead a research group within power equipment technologies.

Responsibilities and tasks

The professorship is a research management position through which DTU wishes to reinforce and develop its activities in the field of Electric Power Equipment Technology. The professor must take the lead in this area, where the tasks include research, teaching and innovation.

The professor is expected to focus on development of knowledge, theory, methods, technologies, and solutions for power equipment in a future intelligent energy system. The research must be related to units for demand, storage and/or small-scale generation connected by low voltage power converters and controlled to provide services to the grid while optimizing the involved processes as an active element in an integrated energy system. The research can include aspects within the grid-connected units (e.g. drives, battery systems, electric vehicle applications, wind turbines etc.) and aspects related to the interaction between the unit and the grid as well as the surrounding energy system (e.g. grid services, power quality, interaction with non-electrical energy systems, etc.). The research is expected to contribute to overarching themes as, for instance, robustness, connectivity (IoT, data analytics), integrated energy systems, and user experiences.

The professor will be responsible for driving internationally recognized research, innovation and education efforts within the area of power equipment technologies. Emphasis will also be placed on developing the collaboration with academic colleagues and industrial partners, both nationally and internationally. Entrepreneurship will be an integrated aspect of the position.

The professor must contribute to the further development of a broad industrial collaboration of the Center for Electric Power and Energy. The centre has established a strategic partnership with the company Danfoss—a world leader within areas of the position. The professor is expected to be an anchor for realization of this partnership through development of collaborations in the form of research activities, PhD projects, and student activities.

The professor will head our Electric Power Equipment Technology research group in the Center for Electric Power and Energy, be part of the centre's leader group as well as contribute to the development of the activities within the centre and the department in general. The responsibilities include strategic long-term planning and the daily collaboration within research, education and innovation.

The professor is expected to benefit from and contribute to DTU's stronghold position within energy research, innovation, and education, including collaboration within the department as well as with other departments. We foresee collaboration with, among others, the department's Automation and Control group and our Electronics group.

The successful candidate is expected to take a lead position in teaching at the BSc, MSc, and PhD levels.

Qualifications

Professors are expected to make a special effort in regards to research, innovation and research management, and, generally speaking, they are requested an effort in continuation of the qualification requirements for the post which are as follows:

- A high level of original scientific production at international level, which has contributed to the further development of the subject area.
- Documented and successful teaching experience at different levels within the University's study programmes, including and, in particular, at PhD level.
- Documented experience in at least one of the following two fields:
 - Research management, including handling management tasks in national or international projects, research programmes, congresses, etc.
 - Innovation, including building up patent areas, applying research results in a commercial context, etc.

The professor is expected to have strong competences in power engineering, electric drives, and converters, and/or power equipment.

The preferred candidate is expected to display entrepreneurship and have strong management skills.

Assessment

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

- the ability to teach
- scientific production at international level, research potential and ability to lead and develop a research team
- the ability to promote and utilize research results
- experience with innovation activities
- an all-round experience basis, including international experience
- the ability to contribute to the development of internal and external cooperation
- track record in attracting funding to the research area
- visions within the research area

For the specific position, consideration will also be given to:

- the ability to build up an internationally recognized research activity
- the ability to develop strong collaborations with fellow scholars and industrial partners
- the ability to integrate entrepreneurship in research, innovation and education activities
- the ability to initiate and manage collaboration projects with external partners
- the ability to lead a successful research group

Salary and terms of employment

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

Further information

Further information may be obtained from Head of department Kristian Stubkjær, tel.: +45 4525 3654 or Head of Center Jacob Østergaard, tel.: +45 4525 3501.

You can read more about Centre for Electric Power and Energy on www.cee.elektro.dtu.dk and Department of Electrical Engineering on www.elektro.dtu.dk.

Application procedure:

Please submit your online application no later than **XXX 2017**. Apply online at 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 in 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
- A plan for future research
- CV
- Documentation for teaching experience (e.g. in the form of a teaching portfolio)
- List of publications indicating scientific highlights
- H-index, and ORCID (see e.g. <http://orcid.org/>)
- Diploma (MSc/PhD)

All interested candidates irrespective of age, gender, disability, race, religion, or ethnic background are encouraged to apply.