

Professor in Mesoscopic Energy Materials and Devices

Department of Energy Conversion and Storage (DTU Energy) at the Technical University of Denmark (DTU) has an outstanding record in the development of new and improved materials and devices for energy conversion and storage, e.g. electrolysis, fuel cells, batteries, thermal energy storage, heat pumps, solar cells and energy harvesting and storage for internet-of-things. The Department employs about 200 people, and is located at the DTU Lyngby Campus.

The department invites candidates to apply for a position as full professor in the area of experimental mesoscopic functional energy materials and devices for energy conversion and storage technologies. The primary scientific task of our new professor will be to open up new research possibilities for the department in the area of nanoscale materials and designed mesoscopic devices, and thereby provide new, engineered properties for applications in energy conversion and storage.

Responsibilities and tasks

The mesoscopic regime presents means to explore and develop the performances of new energy materials, interfaces and surfaces, as well as designed and engineered meta-materials and devices. As professor, you will promote and develop experimental research activities bridging the atomic and macroscopic scales, opening up more possibilities for the department to enter into new research areas within mesoscopic devices, engineered for applications in energy storage and conversion.

We seek candidates to develop a vigorous, independent research area and with interests to develop technologies for use in society, and that leads to sustainable solutions that can enable the green transition of the world. You shall contribute significantly to DTU Energy's vision of demonstrating world leading cross-disciplinary research through innovative technology development. The candidate must take advantage of the collaboration with colleagues, within the department, across DTU and outside DTU.

An important task will be to attract external funding from public and private sources, such as to be able to conduct the research at the highest level. Dissemination of the research, both for scientific peers as well as in the public domain, is an important responsibility.

You will be teaching students at all levels (BSc, MSc and PhD), and be an inspiration and a role model for our young scientists. Your contributions to our research-based education and innovation shall assist DTU in educating the best engineers.

For international candidates, DTU can provide Danish language courses enabling the candidates to teach in Danish within 2-3 years.

Qualifications

As a candidate, we expect you to have demonstrated top-level and original scientific research within mesoscopic energy materials and devices. The research area should comply with one or more of the Department's main experimental research areas, such as functional oxides and thin films with designed new structures, transportation of ions and electrons on the nanoscale, electrochemical materials, and for use in energy conversion and storage applications, e.g., thermo-electrics, batteries, photovoltaics, and microelectronics.

You must have demonstrated the ability to win and manage large-scale research projects, and to have experience and good reputation as a supervisor of students, PhDs and post docs.

You must appreciate teaching, and have documented successful teaching experiences.

Assessment

In the assessment consideration and emphasis 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 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, Professor Søren Linderøth, mail: sqli@dtu.dk, +45 46775801

You can read more about DTU Energy on www.energy.dtu.dk

Application procedure

Please submit your online application no later than **15 June 2020 (23:59 local time)**.

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.

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