

Professor in Aero-Acoustics in Wind Energy

DTU Wind Energy seeks a professor in aero-acoustics with applications in wind energy. The position is intended for a candidate with a strong and well-documented background in aero-acoustics, computational fluid dynamics, and wind energy.

DTU Wind Energy is a department with the overall mission of contributing to research, development and education within the following programme areas: Siting and Integration, Wind turbine technology, Structures and materials and Offshore wind energy. The focus is on the development of wind energy for the benefit of society, and the department is an internationally leading university department in wind energy and cooperates with industry and institutions worldwide. We believe that cooperation between scientists and scientific disciplines and a balanced portfolio of research and innovation, education, and research-based advice and services is the best way to create value for society.

The professor will join the section for Fluid Dynamics at the DTU Campus in Lyngby. Through this professorship, DTU Wind Energy has a strategic aim to strengthen research and education in aero-acoustics in wind energy, with main emphasis on the development of advanced numerical techniques for simulating aerodynamic flow and noise associated with the design and location of wind turbines and wind farms.

Responsibilities and tasks

The position comprises research as well as teaching in aero-acoustics in wind energy. This research field includes:

- Computational aero-acoustics
- Modelling of noise emission from wind turbines and wind farms
- Propagation of noise in complex atmospheric and terrain conditions
- Optimization of wind turbine rotors and wind farm layouts
- Noise perception and public acceptance
- Model validation with data from the La Cour Wind tunnel and field experiments.

The professor is furthermore expected to

- Teach university courses and in continuing education programmes
- Strengthen the collaboration within the department and with other departments at DTU
- Further develop the collaboration with national and international research institutes and industries
- Attract national and international funding for research in wind energy
- Publish and coordinate dissemination of research at a high international level.

The research field shares scientific methodologies with other groups in the department as well as with other departments at DTU. Thus, the Professor should sustain and develop collaboration with other groups at DTU in research, education, and innovation.

The successful candidate is expected to take a lead position in supervision of BSc, MSc, and PhD students as well as postdocs and teaching at 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

Candidates should have obtained well-documented international recognition within their research field. Emphasis will be on the ability to combine a high research level with promotion of external cooperation and exploitation of the research results. A national and international network within the research community as well as with the industry is important.

Additional requirements include

- Original scientific production at international level
- Track record for acquiring external research funding
- Proven skills in supervision of students, teaching and course development
- Experience and skills in research leadership and management, including initiation and coordination of tasks and management in national and international research projects

Assessment

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

- 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
- Ability to contribute to the development of the department's internal and external cooperation
- Track record attracting funding to the research area
- Communication skills

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

- Scientific production at international level, research vision, and potential, and ability to lead and develop a research team

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 Danish Confederation of Professional Associations. The allowance will be agreed upon with the relevant union.

Further information

Further information may be obtained from Head of Section Jens Nørkær Sørensen, tel.: +45 4525 4314, jnso@dtu.dk or Head of Department, Peter Hauge Madsen, +45 4677 5001, npha@dtu.dk

You can read more about DTU Wind Energy at <http://www.vindenergi.dtu.dk/>

Application procedure

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.