Professor (with special responsibilities) in Aero-servo-elasticity and Dynamics of Wind Turbines

DTU Wind Energy at the Technical University of Denmark invites applications for a position as Professor (with special responsibilities) in aero-servo-elasticity and dynamics of wind turbines.

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, and offshore wind energy. DTU Wind Energy develops and creates value from the natural and technical sciences with a focus on wind energy for the benefit of society. The department is an internationally leading center in wind energy and cooperates with industry and institutions worldwide.

The professor will be an important part of the section for Loads and Control and the cross-sectional research and innovation programme on offshore wind energy.

Responsibilities and tasks
The position covers teaching and research in Aero-servo-elasticity and dynamics of wind turbines.

This includes

- Linear and nonlinear dynamics of rotary wind turbine concepts
- Mathematical modelling of aero-servo-elastic systems in wind turbines
- Method development of aeroelastic stability and control analysis of wind turbines
- Aero-servo-elastic design, analysis and assessment of wind turbines
- Supervision of BSc and MSc students, PhD students, and postdocs
- Teaching of aeroelasticity and dynamics of wind turbines at the departments MSc programmes

The candidate is further expected to

- strengthen collaboration between the departments sections and with other departments at DTU
- extend the collaboration with national and international research institutes and industries on wind turbine technologies
- attract funding to the research in wind energy
- publish and coordinate dissemination at an international scientific level
- collaborate with national and international research institutes and industries on wind turbine technologies

The research field shares scientific methodologies with other departments at DTU. Thus, the Professor should sustain and develop collaboration in research, education, and innovation with, e.g., the departments of mechanical engineering and computer science.

The professor is expected to participate in teaching at the BSc, MSc, and PhD levels. Candidates who do not speak Danish should be willing to learn Danish within the first two-three years in order to be able to teach in Danish.

Qualifications
Candidates should have 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, including industrial partners, is important.

Additional requirements include:

- A high level of original scientific production at international level, with demonstrated ability to contribute to further development of the scientific field
- A solid track record of acquiring external funding
- The ability to lead computational and experimental research within one or more of the above mentioned research themes
- Significant and well-documented teaching skills at all levels on the University’s study programmes. Experience in developing new courses.
- Well-developed supervision skills for students, PhD students, and postdocs

- Research management, including handling management tasks in national or international projects, research programmes, congresses, etc.

Assessment
In the assessment of the candidate 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
- Leadership and collaboration
- Communication skills

Consideration will also be given to:

- Experience with project management
- The ability to work in an environment with many nationalities and professional areas
- Proficiency in English and Danish

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 an 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 with the relevant union.

The position is available for a 5-year period and may be extended for up to 3 years more. At the end of the period, the employee in question transfers 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 Peter Hauge Madsen, +45 4677 5001 or the head of the Loads and Control Section, Kenneth Thomsen, +45 9351 1080.

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

Application procedure:
Please submit your online application no later than **XXX 2017**.

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
- CV
- A vision for future research
- Views regarding teaching and research based on the 'Assessment' bullets
- Documentation of precious teaching and research based on the 'Assessment' bullets
- 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.