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 scientific areas: Wind energy systems, Wind turbine technology and Basis for wind energy. The Department, comprised by eight sections, employs 240 persons including presently a scientific staff of 150.

Responsibilities and tasks

The Professor will be attached to the Section for Aeroelastic Design at DTU Wind Energy at the DTU Risø Campus in Roskilde. The position is intended for a candidate with a strong and well-documented background in structural dynamics, aeroelasticity, stability and control of wind turbines and with particular expertise in the following areas:

- 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
- Leadership and fundraising for research within the above mentioned areas
- Collaboration 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 applied mathematics and computer science.

A position as professor with special responsibilities is held for a limited time period and involves all the usual duties associated with a full professorship, as well as fixed-term specific duties which will vary according to the research program.

Qualifications

Candidates should already have obtained well-documented international recognition within their research field. Employment implies original research at the highest international level within one or more of the above mentioned research themes, including extensive publication activity in international journals. Furthermore, the applicant should document experience with initiation, coordination and management of larger international research projects. 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.

Assessment

In the assessment of the candidate consideration will be given to

- the candidate's qualification for handling the special, function-related assignment(s) that are associated with the position
- scientific production at international level, research potential and ability to lead and develop a research team
- the ability to teach
- 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 the department's internal and external cooperation

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- the ability to attract funding to the research area
- visions within the research area

Salary and appointment terms

The appointment will be based on the collective agreement with the 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.

Further information

Further information may be obtained from Head of Department, Peter Hauge Madsen,+45 4677 5001, <u>npha@dtu.dk</u>

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

Application procedure:

We must have your online application by XXX 2013.

Applications must be submitted as **one pdf file** containing all materials to be given consideration. To apply, please open the link "apply for this job 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)
- CV
- List of publications indicating scientific highlights
- Documentation of teaching experience
- A plan for future research

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