

Professor (with special responsibilities) in Structural and Multidisciplinary Optimization within Wind Energy

DTU Wind Energy at the Technical University of Denmark invites applications for a position as Professor (with special responsibilities) in Structural and Multidisciplinary Optimization within Wind Energy.

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 professor will be attached to the section for Wind Turbine Structures, one of the eight sections comprising the Department employing 240 persons including presently a faculty of 150.

Responsibilities and tasks

DTU Wind Energy has a strategic aim through this professorship to strengthen the research in structural and multidisciplinary optimization particularly within offshore wind energy. The candidate is expected to contribute to the following:

- Research within theory, modelling, and method development in structural and multidisciplinary optimization.
- Research-based teaching in theoretical and applied numerical optimization at the bachelor-, master- and PhD-levels.
- Academic leadership and fundraising within the above mentioned areas.
- External collaboration.
- Innovation through development of software for optimal structural design and for multidisciplinary optimization.
- Educational guidance and supervision of PhD students, post.docs., and researchers.
- International academic assessment work.

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. DTU Mechanical Engineering, DTU Compute, and DTU Civil Engineering. The Professor should also support the research within other areas of optimization at DTU Wind Energy such as wind farm optimization.

The professor is expected to participate in teaching at the bachelor-, master- and PhD levels.

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 the relevant research field, including extensive publication activity in international journals. Employment implies original research at the highest international level within one or more of the above mentioned research themes.

Furthermore, the applicant should document experience with initiation, coordination, and management of larger national and 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 is important.

Important qualifications which will be taken into account in the assessment of the current position comprise research and knowledge within the following topics:

- Development and implementation of advanced optimization methods.
- Applications in structural and multidisciplinary optimization.

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
- 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) 46 77 50 01, npha@dtu.dk

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

Application procedure:

Please submit your online application no later than **XXX 2014**. 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
- 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.