

## **Professor in Structural Loads and Safety and Head of Section Structures and Safety**

DTU Civil Engineering invites applications for a full professorship and Head of Section for *Structures and Safety*.

The Section for Structures and Safety covers both traditional and contemporary structural engineering disciplines for buildings, bridges, offshore structures, and other load-carrying structures in the built environment. The disciplines covered comprise structural design, structural analysis, assessment of existing structures and loads on structures. Cross-disciplinary focus areas cover innovative, smart, and adaptive structures and structural assessment based on digital twins.

The research area is key to the optimization of resource consumption and environmental impact associated with establishment of new structures and the assessment and decision making regarding safe and sustainable maintenance of the existing built environment. The research methods are both theoretical and experimental, taking advantage of state-of-the art research infrastructure including a high-performance computing centre and an advanced structural and material test centre.

### **Responsibilities and tasks**

As a full professor in Structural Loads and Safety you are expected to play a leading role in the further academic development of one of the disciplines covered by the section. You will contribute to education, research, and development of at least one of the following areas:

- Structural design for a sustainable use of materials and new design paradigms based on advanced analysis integrated in design tools.
- Analysis, modelling, and probabilistic characterization of mechanical and environmental loadings on load carrying structures
- Models and requirements for documented safety, serviceability, durability, and sustainability of load carrying structures for the built environment
- Loads on and responses of adaptive and smart structures for the built environment

You are expected to take the lead in teaching at BSc, MSc, and PhD levels. For international candidates, DTU provides Danish language courses enabling you to teach in Danish within 2-3 years.

Other primary tasks involve:

- Engagement in fundraising.
- Interdisciplinary collaborative research and innovation projects at national and international level.
- Services to public administrations and the industry.
- Dissemination of research results through scientific publications and towards the industry
- Administrative duties including academic assessment work on all levels.

You are expected to operate within an interdisciplinary research team as well as actively collaborate with other research groups at DTU.

As Head of Section for Structures and Safety you will be responsible for the overall strategic development of the teaching and research of all the disciplines covered by the section and you will be part of the management group, taking part in the overall strategic development of the Department.

In particular, you will be responsible for the day-to-day management of the section with reference to the Head of Department. Key tasks include:

- Management of approx. 30 scientific employees
- Operation and development of the section incl. resources, organization, academia, and quality management
- Relations to stakeholders internally and externally
- Development of the Section's fundraising strategy, research project portfolio and teaching curriculum

## **Qualifications**

You have a strong, proven track record in research, and education on a high international level within Structural safety.

You are enthusiastic about teaching and interaction with students, and you have successful experience in teaching and student supervision in one or more of the disciplines covered by the Section. Furthermore, you

- have a strong profile in research documented through original publications and citations in international scientific journals and proceedings
- have a demonstrated track record in research funding
- have a strong international network
- are creative, innovative, driven by scientific curiosity, and eager to collaborate with students, colleagues, and external partners
- have good communication skills in English and preferably also in Danish or another Scandinavian language, both written and spoken

You are enthusiastic about the chance to lead our Section for Structures and Safety towards new goals meeting the current challenges of the field.

You are an experienced research group and project manager, and you want to develop your leadership professionally. Furthermore, you believe in dialogue and feedback as the best foundation for sound decision-making and strive to develop talent amongst others.

## **Assessment**

In the assessment of the candidates, consideration 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
- Research-based standardization

## **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. For international applicants support for relocation and integration may be offered.

## **Further information**

Further information may be obtained from Head of Department, Niels-Jørgen Aagaard, phone +45 3048 8600, or Professor Henrik Stang, phone +45 3029 1735.

You can read more about DTU Civil Engineering at [www.byg.dtu.dk/english](http://www.byg.dtu.dk/english).

## **Application procedure**

Please submit your online application no later than **XXX 2020 (local time)**. Apply online at [www.career.dtu.dk](http://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 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)
- Documentation of management education and experience, e.g. Diploma and/or signed statement from relevant superior

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.