

Professor in Structural Dynamics

DTU Civil Engineering at the Technical University of Denmark invites applications for a position as Professor in Structural Dynamics. This professorship is supported by funding from The Danish Hydrocarbon Research and Technology Centre. Therefore envisioned that the a wide range of collaborative projects between this centre and the department of Civil Engineering will form the basis of this professorship.

DTU Civil Engineering is a department with the overall mission of contributing to research, development and education within the following scientific areas: construction materials, concrete properties, construction structural design, fire safety, indoor environment, geotechnics, geology and solar energy.

The professor will be attached to the section for Structural Engineering, one of the six sections comprising the Department.

Responsibilities and tasks

The duties consist of:

- Research
- Research-based teaching
- Innovation
- Scientific advice
- Academic leadership
- External fundraising and collaboration

Other duties:

- Innovation and/or Scientific advice
- Knowledge sharing with the public
- Educational guidance and supervision of assistant professors and researchers
- Academic assessment work

It is anticipated that the professor will contribute to research and education in one or more of the following topics:

- Experimental dynamics of large structures
- Structural monitoring and integrity
- Identification of deteriorative mechanisms and effects
- Identification of physical properties using operational modal analysis

The professor is expected to facilitate collaboration on cross-disciplinary projects and to take part in work with government agencies. Furthermore, the professor is expected to form and manage theme based research groups and the candidate must be able to take academic leadership.

It is expected that the professor will establish a close collaboration with the DTU Centre for Oil and Gas on topics relating to the intended research area.

The professor will guide and supervise younger researchers and PhD-students, and carry out some teaching and advising BEng., BSc. and MSc.-students, and to some extent teach at PhD levels. The successful candidate is expected to take a lead position in teaching at the BSc, MSc, and PhD levels.

Qualifications

The qualification requirements match those that apply to ordinary professorships within the main tasks of the position. Emphasis is placed on applicants having the potential to develop the subject area and have documented original scientific production at international level. The qualification requirements are:

- Documented experience in research management, including the performance of management tasks linked to national or international projects, research programmes, conferences, etc.
- In order to be eligible for employment in the position, the applicant must be able to demonstrate appreciable scientific production at international level, which has contributed to the further development of the subject area in question
- Documented and successful education experience at different levels within the fields of DTU's study programmes.
- Significant input in the field of teaching in several of the following areas: establishment of new courses, renewal of teaching activities, preparation of teaching materials, supplementary pedagogical training as well as publications in international teaching journals
- Significant input in the field of education in several of the following fields: planning and implementation of study programmes, evaluation of study programmes, undertaking of management duties for study programmes, supplementary training in didactics, active participation in both national and international education fora, publications in international education journals.

Assessment

In the assessment of the candidates consideration will be given to

- the ability to teach
- scientific production at international level, research potential and ability to lead and develop a research team
- 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 internal and external cooperation
- track record in attracting funding to the research area
- visions within the research area

For the specific position consideration will also be given to:

- Experience with dynamic analysis of prototype structures under ambient and artificial loading
- Development of special strategies, methods or software for advanced analysis of structural vibration

Salary and terms of employment

The appointment will be based on the collective agreement with the Confederation of Professional Associations. The allowance will be agreed with the relevant union.

Further information

Further information may be obtained from Head of Department Niels-Jørgen Aagaard, +45 4525 1877.

You can read more about DTU Civil Engineering at www.byg.dtu.dk

Application procedure:

Please submit your online application no later than **XXX 2016**.

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
- Diploma (MSc/PhD – an official translation into English)
- List of publications indicating scientific highlights

Corporate HR

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- H-index, and Researcher-ID (see e.g. www.researcherid.com)
- Documentation for teaching experience (e.g. in the form of a teaching portfolio)
- A plan for future research

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