

**Professor in Structural Dynamics and Monitoring**

DTU Civil Engineering at the Technical University of Denmark invites applications for a position as Professor in Structural Dynamics and Monitoring.

DTU Civil Engineering is a department with the overall mission of contributing to research, development and education within the following scientific areas: Arctic Technology, Construction Materials, Building Design, Building Physics, Structural Engineering, Geotechnics and Indoor Environment.

The professor will be attached to the Section of Structural Engineering, which is one of the six sections comprising the Department employing about 200 persons including a scientific staff of about 80.

The overall strategic goal of the Section of Structural Engineering is to ensure continued development of the design of load-carrying structures and to ensure the application of best practice. This requires developing new and improved tools for analysis and design as well as increasing the basic knowledge of the behavior of load-carrying structures.

**Responsibilities and tasks**

With the position of Professor in Structural Dynamics and Monitoring, DTU wishes to strengthen and develop the field of structural engineering within dynamics, vibration control and monitoring. It is also a position which includes managerial and administrative duties for the Department. The task will be to conduct research and solve practical problems in the fields of bridge structures, structural dynamics and aero dynamics heading the group working on structural dynamics. The Professor is expected to lead the development and use of new experimental methods and monitoring techniques.

The position covers research, teaching, leadership, innovation and public sector consultancy. The responsibilities include:

- Research (including publication/scientific dissemination duties)
- Research-based teaching (with associated examination duties)
- Academic leadership – in order to strengthen and develop the specific field
- External collaboration
- Other responsibilities:
  - Innovation and/or public-sector consultancy
  - Knowledge sharing with the public
  - Educational guidance and supervision of assistant professors and researchers
  - Academic assessment work

The Professor is expected to promote ongoing collaboration with DTU Mechanical Engineering and DTU Wind Energy within in a new “Villum Center for Advanced Structural and Material Testing”. It is also expected that the professor continues the collaboration with FORCE Technology with respect to the research use of the new climatic wind tunnel situated close to DTU Campus.

The successful candidate is expected to take a lead position in teaching at the bachelor-, master- and PhD levels. Please note that the teaching on bachelor level is required to be in Danish and on master level in English. International candidates are required to take courses in Danish and teach in Danish after a period of 2 to 3 years.

**Qualifications**

Candidates are expected to make a special effort with regards to research/innovation and research management. Generally speaking, professors are expected to perform over and above the qualification requirements for the post which are as follows:

- A high degree of original scientific production at the international level that has contributed to the further development of the subject area in question.
- Documented and successful teaching experience at various different levels within the courses offered by the university, particularly at the PhD level.
- Documented experience in at least one of the following two fields:
  - Research management, including the performance of management tasks linked to national or international projects, research programmes, conferences, etc.
  - Innovation, including the establishment of patent areas, the use of research results in commercial applications, etc.

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

- Static and dynamic analysis of structures
- Cable supported Bridge Structures
- Wind tunnel testing of structures
- Icing and rain induced cable vibrations
- Structural monitoring
- Assessment of dynamic loads
- Structural vibration control and practical damping methods

### 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 the Department's internal and external cooperation
- track record in attracting funding to the research area
- visions within the research area

### 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 Michael Havbro Faber, +45 4525 1787.

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

### Application procedure:

Please submit your online application no later than **XXX 2013**. 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 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

HR Rekruttering

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- Documentation of teaching experience
- A plan for future research
- A research and teaching vision, which outlines long and short term strategies
- A position statement, which describes the national and international position of the applicant
- Copies of relevant publications to be considered by the assessment committee

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