

Professor in Sustainable Buildings and Construction

DTU Civil Engineering invites applications for a full professorship in the Section for Design and Processes.

The Section for Design and Processes covers design of new facilities as well as retrofitting of existing facilities in the built environment based on research within building design in Denmark and the Arctic, architectural engineering, fire safety, process modelling and, interoperable building information modelling. We have a holistic cross-disciplinary focus and always strive to include partners in our research activities to develop technical solutions that can enable the green transition of the built environment.

The professorship is dedicated to sustainability in civil engineering focusing on buildings and transportation infrastructures. As climate impact and resource consumption in the construction industry and the built environment is monumental, we are obliged to contribute to sustainable change, and the professor will do so by developing and applying unbiased and research-based sustainability assessment methods to Civil Engineering including functionality, technic, processes, design, and risks. This will be pursued in collaboration with generic approaches and other domain specific activities at DTU.

Responsibilities and tasks

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

- Science based sustainability assessment methods for buildings and building components
- Building and infrastructure design methods taking sustainability into account
- Circular construction and building design, e.g. design for disassembly or risks in reuse
- Integration of sustainability and risk assessment for civil engineering design methods and solutions.

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, standardization, 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 and other universities.

Qualifications

You have a strong, proven track record in research, and education on a high international level within assessment of sustainable performance in the built environment and you are familiar with the complexity of the construction industry and stakeholder positions.

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 conference proceedings
- have a demonstrated track record in research funding
- have documented experiences in international standardization

- 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 an experienced research group and project manager, and you believe in dialogue and feedback as the basis for sound decision-making

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 Head of Section Jan Karlshøj, phone +45 4020 4608.

You can read more about DTU Civil Engineering at 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.

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)

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.