Professor(s) in Chemical and Biochemical Engineering

DTU Chemical Engineering aims at increasing the theoretical understanding of technical chemical and biochemical processes and products, while keeping industrial applicability in focus. Experimental work is carried out across all scales from micro-scale and laboratory scale to pilot and industrial scale. Results are interpreted through development and use of mathematical models based on fundamental scientific principles. The department enjoys a particularly close and mutually beneficial relationship with many Danish-based industrial companies, as well as with leading universities and industries from all over the world. Innovation through industrial implementation of research results is thereby a natural component of the department's strategy.

The department covers the core chemical engineering disciplines: engineering thermodynamics, reaction engineering, transport phenomena (i.e. heat and mass transfer, fluid mechanics), separation processes, unit operations, process systems engineering, dynamics and process control, product design and production. In addition the department teaches and performs research within areas of particular practical importance, such as polymer materials, coatings science and technology, heterogeneous catalysis and biocatalysis, enzyme technology, industrial fermentation, membrane technology, energy and environmental sustainability, combustion and gasification, high-temperature processes, particle technology, oil and gas, and computer-based process design, scale-up and optimization.

As part of the celebration of the 150 years anniversary of Technical Chemistry at DTU and in connection to our inauguration of new laboratories and pilot facilities, the department aims to further strengthen its Faculty by one or more full professors in core areas of Chemical and Biochemical Engineering. We will consider all applications in the core disciplines of Chemical and Biochemical Engineering, whilst preference will be given to candidates with both experimental and theoretical interests, e.g. in the areas:

- Process systems engineering
- Sustainable energy, including low-CO₂ technologies
- Organic coating science and technology, linked to the Hempel Foundation Coatings Science and Technology Centre
- Applied biothermodynamics
- Downstream bioprocessing, linked to the Novo Nordisk Foundation Fermentation based Biomanufacturing (FBM) initiative

We expect applicants to have a great interest in education, research and innovation, to have a strong ability to motivate colleagues to be their best and achieve their goals, as well as to be open minded for cooperation at the department, with other departments at DTU and with external partners.

Responsibilities and tasks

The successful candidate is expected to take a lead position in teaching at the BSc, MSc and PhD levels. For international candidates, DTU can provide Danish language courses enabling the candidates to teach in Danish within 2-3 years.

Close cooperation with other research groups at the department and at other departments at DTU working in fields related to the position is also a priority

Qualifications

The preferred candidate(s) have experience on the highest level within the research field, shown capability to grow the field to a significant level, experience with management – and ability to teach within core fields of Chemical and Biochemical Engineering The applicant should meet the following criteria for appointment:

- A high level of original scientific production at international level which has contributed to further development of the subject areas in question.
- Documented and successful teaching, including development and planning of courses and experience in project supervision at all levels covered by the study programmes at DTU
- Documented experience in research proposal development, research leadership, including management of large research projects, seminars, conferences etc.
- Documented experience with innovation.

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

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.

Further information

Further information may be obtained from Head of Department, Professor Kim Dam-Johansen, tel.: +45 4525 2845, kdj@kt.dtu.dk.

You can read more about DTU Chemical Engineering at www.kt.dtu.dk/english.

Application procedure

Please submit your online application no later than **XXX 2019 (local time)**. Apply online at <u>www.career.dtu.dk</u>.

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.