

## Assistant Professor

Ecole/Institution/Société:

**Technical University of Denmark, Denmark / Lyngb**

Discipline:

**Engineering Education**

Type d'emploi::

**Full-time**

Date de publication:

**2022-04-20**

Personne à contacter:

**If you wish to apply for this position, please specify that you saw it on AKATECH.tech**

### Tenure Track Assistant Professor in Digital Twin in Food Engineering

The National Food Institute (DTU Food) at the Technical University of Denmark invites applications for a position as Assistant Professor in the Research Group for Food Production Engineering. The Research Group uses food process technologies in creating sustainable and effective food production, optimizing resource consumption, utilizing side streams, and developing technologies and food products for specific requirements.

The group has a dynamic staff with high international visibility, many research collaborations with leading international universities, organisations and a successful track record of national and international research projects. The assistant professor position is part of DTU's Tenure Track program. DTU's Tenure Track is an appointment of at most six years, during which you will receive career support in the form of professional and personal guidance.

At the end of the tenure track appointment, you will be evaluated by an external assessment committee, who will assess your appointment to a permanent Associate Professorship.

Read more about the DTU Tenure Track program at DTU at this homepage. Responsibilities and qualifications The responsibilities will include the utilization of different machine learning tools, the development and deployment of digital twin solutions for transdisciplinary applications in domains such as optimization of various food-processing operations, reducing food quality loss in supply chain and developing an integrated approach to optimize the use of food and agricultural waste streams. You will contribute to the research group by:

- Conducting research at the interface of food processing, traditional computer simulations, and machine learning /deep learning digital twin.
- Scientific interactions and collaboration with colleagues and internal and external network (universities/government agencies/industry)
- Development of new externally funded projects
- Disseminate results in international scientific journals and at conferences
- Teach courses and supervising projects for [B.Eng.](#), [M.Sc.Eng.](#) and Ph.D. students
- Engage in collaboration with industry and authorities.
- You should have a clear vision for the research field, the development of the research group and the collaboration within DTU and abroad. You will contribute to the development of the research group with about 15 staff members. The research dispose over a "state of art" food tech laboratory and pilot plant.
- The Digital twin, as a research approach, is in its initial stage but a very high priority at the

department. You will be expected to teach in the area of food engineering and must be responsible for the teaching of courses. You will be expected to complete pedagogical course for university teaching at DTU.

- You will be expected to learn Danish and be able to teach in Danish after 3 years. DTU can provide Danish language courses. You can be involved in scientific advice for authorities as well as working closely with industrial partners. As formal qualification you must hold a PhD degree (or equivalent) in the area of Food technology, Food or Bioprocess Engineering, Chemical Engineering, or other related field. Furthermore:
- You must have in depth experience on the use of data analytics machine learning (deep learning), mathematical modelling and development of digital tools in food, biological material or biochemical processing systems.
- You must have documented research experience in an integrated approach to optimize the use of food or chemical process systems or agricultural waste streams.
- You should have experience with food processing and characterization techniques
- Flexibility and self-motivation are desired skills at DTU. In addition, we expect you to be a team player and interested in collaboration internally and externally. You will be assessed against the responsibilities and qualifications stated above and the following general criteria:

### **Experience and quality of teaching**

- Research experience
- Research vision and potential
- International impact and experience
- Societal impact
- Innovativeness, including commercialization and collaboration with industry
- Leadership, collaboration, and interdisciplinary skills
- 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 salary for the position will be determined by the applicant's qualifications and in agreement with the relevant union. Further information on qualification requirements and job content may be found in the Ministerial Order on Job Structure for Academic Staff at Universities. You can read more about career paths at DTU here. Workplace is DTU Lyngby Campus, DK-2800 Kgs.

Lyngby, Denmark. The candidate is expected to take up the position in September 2022 or soon hereafter. Further information Further information may be obtained from Group leader, Associate Professor Mohammad Amin Mohammadifar, [moamo@food.dtu.dk](mailto:moamo@food.dtu.dk) +45 45 25 49 22, Associate Professor, Aberham Hailu Feyissa [abhfe@food.dtu.dk](mailto:abhfe@food.dtu.dk) and Head of Department, Christine Nellemann [clne@food.dtu.dk](mailto:clne@food.dtu.dk) You can read more about DTU Food at [www.food.dtu.dk](http://www.food.dtu.dk).

If you are applying from abroad, you may find useful information on working in Denmark and at DTU at DTU - Moving to Denmark. Application procedure Please submit your online application no later than 15 May 2022 (Danish time). Apply 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)

- Vision for teaching and research for the tenure track period
- CV including employment history, list of publications, H-index and ORCID (see <http://orcid.org/>)
- Teaching portfolio including documentation of teaching experience
- Academic Diplomas (MSc/PhD)

Applications 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. Technology for people DTU develops technology for people. With our international elite research and study programmes, we are helping to create a better world and to solve the global challenges formulated in the UN's 17 Sustainable Development Goals.

Hans Christian Ørsted founded DTU in 1829 with a clear vision to develop and create value using science and engineering to benefit society. That vision lives on today. DTU has 12,900 students and 6,000 employees. We work in an international atmosphere and have an inclusive, evolving, and informal working environment. DTU has campuses in all parts of Denmark and in Greenland, and we collaborate with the best universities around the world

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