

Professor in Analytical Food Chemistry

The National Food Institute at the Technical University of Denmark (DTU Food) invites applications for a position as professor within Analytical Methodologies in Food Chemistry. The candidate will focus on applying new analytical strategies and technologies to solve emerging issues in food control, risk assessment and understanding the health effects of our diet. The professor is expected to manage a newly formed research group for Chemical Food Analysis with about 20 staff members.

This new research group is one of thirteen research groups that form the National Food Institute at DTU. The objective of the National Food Institute is to establish the scientific foundation to empower authorities, decision-makers and consumers to select healthy, safe food, thereby promoting health and preventing diseases related to diet, environment or chemical or microbiological contamination from our food. The outcome is to provide research-based advice to public authorities and to the Danish and international food industry to ensure the availability of safe, sustainable and high-quality food.

Responsibilities and tasks

The candidate is expected to lead the development of the Chemical Food Analysis group to focus on analytical methodologies in food chemistry, combining accurate mass spectrometry with emerging technologies and data processing to provide comprehensive chemical data for food and health science. The research will cover screening methods for foods, metabolomics from microorganisms, animal and humans for detailed studies metabolic effects in health and toxicology to new strategies in food control. The section will be responsible for the National Reference Laboratories in Food Chemistry (according to EU 882/2004) and is therefore accredited according to ISO 17015. Besides NRL, the section is responsible for various other tasks for the Danish and EU Food Authorities.

Leveraging recent developments in analytical chemistry, in particular high accuracy mass spectrometry, informatics and exponential technologies (sensors and big data), the candidate is expected to contribute to the development of new analytical strategies and methodologies that efficiently provide comprehensive data of high quality needed for modern food science. The candidate is expected to be at the forefront of food science research, addressing challenges in food chemistry such as:

- Unravelling metabolic networks to study the effects of chemicals, food and biota by metabolomics, chemical profiling and target analysis.
- Food surveillance and authenticity, efficiently providing detailed data on food contamination with a focus on small molecules (residues and contaminants).
- Challenging the current analytical strategies within food science and food control by using emerging analytical technology and strategies.

The professor is expected to take the lead as head of the National Reference Laboratories together with the staff in the section. The candidate is expected to develop collaborations with Danish and international food and official laboratories.

It is expected that the candidate will contribute to several on-going projects, as well as new projects that will lead to entirely new directions, thereby creating high-profile publications and innovation.

In addition to collaboration within DTU Food, collaborations with the Departments of Systems Biology, Chemistry, and Nanotechnology will be particularly relevant.

The successful candidate is expected to take a lead position in teaching at the bachelor-, master- and PhD levels.

Qualifications

Candidates should already have obtained well-documented recognition within their research field. Employment entails original research at a high international level within the above-mentioned fields of research as well as contributing research-based advice to authorities.

As the candidate is expected to manage a newly formed research group, strong management skills are required for managing staff, contracts, and the operation of a large laboratory and research projects in the intersection between authorities, industries and universities.

Also, given the responsibilities of this position, the candidate should have extensive knowledge of food control systems, accreditation and public sector contracts, as well as the requirements of accreditation.

The successful candidate should be able to document experience with teaching at all university levels. He/she should have solid experience with high-resolution mass spectrometry, chromatography, metabolomics and running a large chemical laboratory.

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

For the specific position consideration will also be given to:

- Experience with public governance in food control systems and food monitoring, including the international control systems
- Reference laboratories.
- Experience with accreditation and proficiency testing in food chemistry.
- The candidate's ability to handle the function-related assignments associated with the position, including close collaboration with Danish and international food authorities.
- Management experience with a focus on research management, public sector contract, staff management and management of large analytical infrastructures (service and operational management).

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 upon with the relevant union.

Further information

Further information may be obtained from Head of Department Christine Nellemann, +45 4158 4510.

You can read more about the Department at <http://www.food.dtu.dk/english>

Application procedure:

Please submit your online application no later than **XXX 2015**.

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
- Documentation of teaching experience
- A plan for future research

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