

Research Professor, Food Production

Form of employment: Full time, Fixed term

Locations: Espoo, Finland

Job area: Industrial biotechnology and food solutions

Application period: July 04, 2018 - September 09, 2018

VTT Technical Research Centre of Finland Ltd is one of the leading research and technology organisations in Europe. Our research and innovation services give our partners, both private and public, all over the world a competitive edge. We pave the way for the future by developing new smart technologies, profitable solutions and innovation services. We create technology for business – for the benefit of society.

VTT Business area Solutions for Natural Resources and Environment promotes bio-economy and sustainable use of natural resources as well as solutions to realize circular economy. We focus on creating impact to our customers and society at large based on our scientific and technological excellence. We carry out applied research on industrial biotechnology, food solutions, biomass processing and bio-based products, sustainable chemistry and low-carbon energy.

We are looking for a research professor in the field of food innovations.

Research professors are key experts in VTT's research network contributing to implementation of VTT strategy. Research professor's role is to promote and lead innovative research in a defined research area taking care of competence gaps and supporting competence development for future need. In addition, the research professor support challenge-driven way of working and ensures scientific excellence in his/her field. The research professor is expected to build strong research project portfolios, manage large research openings and projects, actively collaborate with academic and industrial partners and stimulate active use of research results by beneficiaries, and publish and disseminate scientific results. The research professor is also expected to create international networks and collaborations and influence research and innovation agendas.

Do you want to join us in creating scientific and technological excellence for the benefit and competitiveness of companies and the society?

With us you will be responsible for

VTT paves the way to sustainable, smart, consumer-driven food production, where food increases the well-being both of the people and the planet. Our vision roadmap, Food Economy 4.0, deals with the fourth revolution currently underway in food production. The current agriculture and mass production of food are challenged by megatrends such as globalisation, digitalisation and climate change, which are shaping the latest revolution. Trends specific to the food system, such as health, personalisation, convenience, pleasure-seeking, transparency, sustainable production and safety also need to be addressed.

We concentrate on raw material efficiency in food manufacture, as a large part of the raw materials does not currently end in food use and is used either as feed or even wasted. Smart holistic use of raw materials to amplify food yields from the current agro input is therefore in our focus. There is a large need for new dietary protein sources, which is one key area of work at VTT. We also produce raw materials without fields, developing new concepts of cellular agriculture from cellular to process engineering. Another important topic is development of new concepts for more personalised food offering, f.ex. using additive manufacturing and automated rapid food production. This also means moving from centralised food production and distribution towards more agile processing models.

As a research professor you will be responsible for creating scientific and technological excellence in this transforming field of food production. The focus is in technologies and processing for sustainable and healthy ingredients and foods. You should develop bioprocesses and biomaterial conversions from lab to pilot scale,

from idea to proof of concept. We expect you to initiate and lead large multidisciplinary national and international collaborative consortia. Close interaction with industrial stakeholders in the value-chain will be a necessity.

We expect you to have

The applicant should have a proven record on multi-disciplinary approach for food systems. He or she should have solid knowledge in at least one of the areas of food material science, food processing and understanding of food product design and quality attributes. Competence in bioprocessing, automation and agile manufacturing and delivery systems or service design are regarded an advantage.

For all research professors we expect you to have

- Track record on research management and management of national and international projects together with academic and industrial partners
- Knowledge on national and international innovation system and funding entities as well as proven capability to raise innovation funding
- Wide international research and industrial networks
- People and substance matter leadership
- Excellent communication, presentation and networking skills
- University degree at PhD level in relevant field
- Fluent command of English.

As a person you are

- Visionary, challenge-driven, eager to innovate and go beyond obvious
- Proactive and open-minded networker and playmaker
- Inspirational creating positive drive and getting people excited
- Motivated to share, collaborate and coach young scientists in their career
- Business-minded striving to create impact rooted in scientific excellence
- Well-organised and energetic with intrinsic “can do” - attitude

We offer

A great opportunity to develop scientific and technological excellence together with VTT’s top experts in a leading multi-disciplinary RTO and to co-create with industrial customers. You will be a part of a creative and international working environment. The tasks are versatile, independent and challenging, with support and coaching where needed. VTT is a modern, well-equipped working environment with competent, internationally oriented and highly trained personnel assisted by skilled business support professionals.

The position of the Research Professor is fixed-term for 5 years (with possibility of new 5 years period). The salary and benefits will be determined according to the salary level of corresponding positions at VTT. Applicants may also present a salary request. We may also consider more junior tenure track applicants for the vacancy.

For further information

Requested documents

The applicants are requested to enclose the following documents with the application:

- A complete curriculum vitae (including full name, date and place of birth, nationality, current residence, education and degrees awarded, linguistic skills, current and previous positions, major research funding obtained, research leadership, list of supervised PhDs and post-doctoral researchers, other academic merits, number of peer-reviewed articles, H-index, total citations and average citation per item) maximum 10 pages.
- A complete list of publications (with citations and impact factors) and copies of ten selected publications most relevant for the professorship

- Summary of research activities carried out so far (maximum two pages)
- A research plan and ambitions as a research professor (maximum five pages)

VTT uses international experts to help evaluate its applicants. All application documents should be in English.

For further information please contact Tiina Nakari-Setälä, Vice President, Research (tiina.nakari-setala@vtt.fi) and Arto Forsberg, Vice President, Industrial biotechnology and food solutions (arto.forsberg@vtt.fi)

Don't hesitate to contact us if you want to know more of the qualifications required.

Applications: <https://jobs.vtt.fi/vacancies>