

Professor in Fishing Gear Performance

DTU invites applications for a position as professor in the research field of characterizing and improving performance of fishing gear. The professorship is affiliated with the National Institute of Aquatic Resources (DTU Aqua), Section for Ecosystem based marine management, and is based in Hirtshals in North Jutland. The position is offered as a 50% employment under a collaboration agreement with SINTEF, one of Europe's largest independent research organizations, in cooperation with the Norwegian University of Science and Technology (NTNU).

The section for Ecosystem Based Marine Management conducts research on the direct and indirect effects of fishing and other anthropogenic activities on the marine environment. The aim is to develop knowledge and tools for use in an evidence-based ecologically and economically sustainable management. Activities of the section are structured in four research areas. Marine habitats focuses on the importance of habitats for fish stock dynamics. Fisheries technology addresses the efficiency, selectivity, and environmental impact of the fishing process. The aim is to reduce unwanted bycatch of fish, marine mammals or seabirds, and the impact on the marine environment, while improving the efficiency and competitive abilities of the fishery.

Research in Fisheries management creates the scientific basis for advice on effects of management measures, such as limits to the amount of fish landed, closed areas and multiannual management plans, and for determining their likely effects on the ecosystem and the value of the fishery. Research in Ecosystem effects of fishing focuses on the quantitative analyses of indicators and reference levels for the interaction between fisheries and marine mammals, seabirds and benthos, and the contribution of these and other indicators to Good Environmental Status under the European Marine Strategy Framework Directive. It further addresses the interactions between the ecosystem, fisheries and other maritime activities, providing the basis for advice on reducing conflicts, and the management of marine ecosystems and maritime activities in general.

Responsibilities and tasks

The professor's research field is the development and implementation of new methods for data collection and assessment of selectivity in fishing gears, programming of user-friendly software tools to simulate species and size selective processes, acquire and analyse selectivity data and fish morphology and behaviour based on modern vision technology. The research is conducted in a combination of analysing data acquired from commercial fisheries, computer-based simulations, tests in the SINTEF flume tank, located in Hirtshals, and sea trials in an interlinked approach. Activities are expected to be conducted in cooperation with other research sections of the institute, other units at the University and relevant research groups, especially in Norway. SINTEF and NTNU are important collaboration partners of DTU Aqua and in a shared position with SINTEF, the professorship is expected to contribute to the coordination of common research, innovation and education activities in the field of fisheries science, not least in fisheries technology.

An important focus is implementation and coordination of multidisciplinary research activities linking fisheries and biological science, statistical and modelling approaches using innovative technology to improve the performance and effectiveness of fishing gear and fishing operations. The professor is expected to take lead in acquisition and execution of large national and international multidisciplinary research projects and help deliver results into application by fisheries management authorities and the fishing industry.

The successful candidate is expected to take a lead role in teaching at the BSc, MSc, and PhD levels, including supervision and training of PhD students, postdocs, and junior scientists and coordinating education and training activities in the research field with SINTEF, NTNU and other universities in Norway. Specifically, a substantial contribution to the BEng in Fisheries technology taught largely on Greenland, ARTEK – DTU Campus Sisimiut is expected.

For international candidates, DTU can provide Danish language courses enabling the candidates to teach in Danish within 2-3 years.

Qualifications

Candidates should have a well-documented international recognition within the research field of fisheries technology, being visionary and quantitative in their scientific approach and able to initiate and coordinate crucial research activities within national and international partnerships, with a geographical focus on

Norway. The position is intended for a candidate with a track record of internationally acknowledged innovative research, especially modelling and statistical analyses and implementing modern sensor technology as well as teaching, supervision, and training on all university levels. Experience in high school teaching will be an advantage, as undergraduate BEng teaching starts at basic level. Experience in advisory work to public authorities, international advisory bodies, and industry is expected, and an outstanding record in research leadership including acquisition, planning, implementing, and running multidisciplinary research projects is required. Participation in sea trials is expected and knowledge on experimental design for selectivity trials and on analysis of data from sea trials will be an advantage.

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

Consideration will also be given to:

- scientific production and research potential
- experience in giving advice to national authorities, international advisory bodies, and stakeholders
- research leadership in implementing and coordinating multidisciplinary research programmes
- ability to promote and utilize research results in management advice

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 Confederation of Professional Associations. The allowance will be agreed with the relevant union.

The position is a 50% employment under a collaboration agreement with SINTEF Ocean. Workplace will be in Hirtshals, Denmark.

Regular travelling to Norway is expected. In addition, coverage of two – three block courses (2-4 weeks) per year as part of the newly established BEng Fisheries technology on DTU campus Sisimiut is required.

Further information

Further information may be obtained from Institute Director Fritz Köster, email: fwk@aqua.dtu.dk, cell phone: +45 21362805 or Research coordinator Ludvig Ahm Krag, tel.: +45 21316457, email: lak@aqua.dtu.dk.

You can read more about DTU Aqua on www.aqua.dtu.dk and SINTEF Ocean on www.sintef.no/ocean/.

Application procedure:

We must have your online application by

To apply, please open the link 'Apply online', fill out the online application form. The following must be attached in English:

- Application (cover letter) addressed to the President of DTU
- CV
- A vision for future research

- Research and teaching statement, with a focus on the 'Assessment' bullet points listed above
- Documentation 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.