

## **Professor in Environmental Impact of Towed Fishing Gear**

DTU invites applications for a position as professor in the research field of environmental impact of towed 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 successful candidate is expected to lead the newly established research group on environmental impact of fishing gear.

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 focusses 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 of towed fishing gear that reduces the effect of commercial fishing on marine bottom habitats and associated biological communities, and sensitive species as well as to reduce unwanted by-catch, while maintaining the profitability of the fisheries. An important focus is application, implementation, and coordination of multidisciplinary research linking fisheries and environmental science, statistical and modelling approaches using innovative technology to improve the environmental performance and effectiveness of fishing gear and fishing operations. Activities are expected to be conducted in cooperation with other research units of the institute, other departments at the University and relevant research groups in Europe, as well as fisheries management authorities and the fishing industry.

Especially, cooperation with the equipment manufacturers, processing and fishing industry in research and innovation projects that link competences in biology, technology and economics to fisheries technology is required. In recent years, the impact of fishing on the environment has increasingly got into focus, especially the impact of towed fishing gear on the seabed and benthic ecosystems. To reduce overall impact requires an evaluation of impacts from different parts of fishing gear and how the effect by each part can be reduced without diminishing the efficiency of the gear, providing the basis for the development, establishment, and implementation of a second generation of intelligent, targeting, and environmentally friendly fishing gear. The professor is expected to take the lead in implementing and running large international and national multidisciplinary research projects and to couple these research activities and generated scientific results to advisory activities on fisheries management. Advisory work addresses the objectives of the Common Fisheries Policy and the Marine Strategy Framework Directive as well as the targets defined by UN Sustainable Development Goals.

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

### **Qualifications**

The position is intended for a candidate with a track record of internationally acknowledged research in fisheries technology, impact of fishing on benthic habitats, sensitive species and ecosystems, avoidance of

unwanted by-catch, fishing gear innovation in cooperation with the fishing industry, and experience in giving advice to public authorities, international advisory bodies, and stakeholders. Candidates should have well-documented international recognition within their research field, being visionary in their scientific approach, and able to initiate and coordinate crucial research activities. This includes a documented record in leadership of multidisciplinary research projects, including planning, implementing, running, and reporting activities to funding organizations, international advisory groups, the scientific community, stakeholders, and the public at large. Specifically, knowledge of and visions for integrating research findings into fisheries management procedures and utilization of research results for improving the environmental performance of capture fisheries are expected. Experience in supervision and training of PhD students and postdocs as well as contribution to teaching at MSc/BEng level is required.

### **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.

### **Further information**

Further information may be obtained from Institute Director Fritz Köster, email: [fwk@aqua.dtu.dk](mailto:fwk@aqua.dtu.dk), cell phone: +45 21362805 or Section leader Anna Rindorf, tel.: +45 3588 2278, email: [ar@aqua.dtu.dk](mailto:ar@aqua.dtu.dk).

You can read more about DTU Aqua on [www.aqua.dtu.dk](http://www.aqua.dtu.dk)

### **Application procedure**

Please submit your online application no later than **XXX 2019 (local time)**. Apply online 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) 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.