AR-960

Møde nr.: 66 Dagsordenspunkt: 3 Dato: 13/12/18

Professorship in Chemical Oceanography

Applications are invited for a position as professor in the research field of chemical oceanography. The professorship is affiliated with the National Institute of Aquatic Resources (DTU Aqua), Section for Oceans and Arctic located in Lyngby.

The research spectrum of the Section for Oceans and Arctic covers oceanography, marine ecology, observation technology, and the Arctic. The research into oceanography integrates biological, physical, and chemical parameters' interactions in the ocean, ranging from individual plankton to regional seas. We focus on understanding the key processes that govern the structure and function of pelagic food webs, as well as climate and ecosystem interactions. The research in marine ecology establishes how processes affecting individuals shape populations and ecosystems. Focus is on fish, but not exclusively, as lower trophic levels are addressed as well and relevant species and environmental interactions are targeted. Observation technology is a multidisciplinary activity aimed at integrating traditional and emerging methods in acoustics, optics, and image analyses to support research in the section and DTU Aqua. DTU Aqua's Arctic research is a regional component that cuts across the other research disciplines in the section. The research activities are based on a close collaboration with the Greenland Institute of Natural Resources as well as other partners in Europe and North America.

Responsibilities and tasks

The professor's research field will be i) biogeochemistry of nutrients and organic matter, ii) ocean optics and photo-chemistry, iii) tracing water masses using chemical characteristics, and iv) spectroscopy in analytical environmental chemistry applications. The primary task of the professor will be to build up a research group on chemical oceanography in collaboration with other research sections at the department, other units at the university, and relevant national and international research groups. The professor will be coordinating chemical oceanographic activities covering all marine waters and has a special obligation to take the lead in coordinating the section's oceanographic and marine ecological activities in the Arctic. This includes a contribution to advisory tasks on the impact of climate change and human activities on arctic ecosystems. Innovation aspects relate to the development and implementation of systems recording the distribution and conversion of material in the sea and industrial water systems. The successful candidate is expected to take a lead role in teaching at the BSc-, MSc-, and PhD levels. For international candidates, DTU offers Danish language courses for the purpose of being able to teach in Danish within the first 2-3 years.

Qualifications

The position is intended for a candidate with an international track record in chemical oceanography, i.e. research in the chemical composition of seawater and understanding of how both physical and biological processes influence the biogeochemical cycling of elements in the sea. The candidate should have experience in the field of experimental and theoretical approaches in chemical oceanography and related research fields like optical and physical oceanography. Employment implies original research at the highest international level and a record in research leadership, including visionary strategic development as well as planning, implementing, and running innovative research projects. It is further expected that the candidate has extensive experience in teaching at all academic levels, including supervision and training of PhD candidates and postdocs.

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 collaboration with industry
- international impact and experience
- · leadership and collaboration
- communication skills.

Consideration will also be given to:

- scientific production at international level including research potential
- visions within the research and innovation area

- ability to develop and lead a research team and secure growth within the group
- teaching experience at all academic levels including supervision and training of PhD candidates and postdocs
- the ability to contribute to the development of the department's internal and external cooperation
- experience in giving advice to public authorities and international advisory bodies
- the ability to promote and utilize research results.

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 allowance will be agreed upon with the relevant union.

Further information

Further information may be obtained from the Head of Department Fritz Köster, +45 3396 3300, email: fwk@aqua.dtu.dk or Head of Section Karen Edelvang, +45 3031 9075, email: kaede@aqua.dtu.dk.

You can read more about DTU Aqua on www.aqua.dtu.dk

Application procedure

Please submit your online application no later than XXX 2018 (local time).

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.