

Professor in Plasma Physics and Fusion Energy

DTU Physics at the Technical University of Denmark invites applications for a position as Professor in Plasma Physics and Fusion Energy.

DTU Physics embraces research activities in a number of areas: Biophysics and complex systems, catalysis for sustainable energy, experimental surface and nanomaterials physics, neutrons and x-rays for materials physics, plasma physics and fusion energy, theoretical atomic-scale physics, and quantum physics and information technology.

With this position the Department wishes to strengthen the new activities at DTU Physics within plasma physics and fusion energy.

The professor will be affiliated to the Section for Plasma physics and fusion energy, which is one out of six sections in the Department. The section hosts the Danish contribution to the international fusion energy programme and is embedded into the Euratom activities. Innovative development of diagnostics for tokamaks and first principles simulations of plasma dynamics at the edge region of tokamaks are focal points of the sections scientific work.

Responsibilities and tasks

The professor will head the Section for Plasma physics and fusion energy and he/she is expected to establish or expand collaboration with other research groups at the Department and with other Departments at DTU. Furthermore, the Professor is expected to position Danish fusion research in Europe, to strengthen the Danish participation in the fusion programme and to represent the Danish association in the relevant European bodies.

It is expected that the professor takes a lead position in teaching at the bachelor-, master- and PhD levels. The teaching involves courses and supervision at all university levels. The MSc and PhD studies are taught in English, whereas the BSc and Diploma studies are taught in Danish. The candidate is expected to master Danish within a reasonable time after being appointed. Furthermore, the successful candidate is expected to contribute to a continuous expansion of national and international networking activities.

A large part of the research at DTU Physics is externally funded. Responsibilities as project manager as well as active participation in fund-raising are expected at an appropriate professor level.

Qualifications

The applicant must be an experienced scientist within plasma physics and fusion energy. A track record of outstanding accomplishments in several of the following areas is expected:

- Theoretical and experimental plasma physics
- Modelling and numerical simulations of plasmas
- High performance computing
- Transport processes and SOL physics
- Fusion energy

It is expected that the applicant has experience with research leadership and that he/she has experience with European fusion activities.

The applicant must have teaching experience at bachelor-, master- and PhD-levels and have experience with supervision of projects as well as training of post docs.

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

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 Head of Department Jane Hvolbæk Nielsen, tel.: +45 4525 3222.

You can read more about DTU Physics [here](#).

Application procedure

We must have your online application by **xx 2013**.

Applications must be submitted as **a single 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
- List of publications indicating scientific highlights
- Documentation of teaching experience
- A plan for future research, indicating also the potential synergy with other activities in the Department, at DTU, and outside DTU.

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