# **Professor in Theoretical Nanoelectronics/Computational Nanotechnology**

DTU Nanotech is a multi-disciplinary department based on both top-down and bottom-up micro- and nanotechnology.

DTU Nanotech wishes to strengthen its activities in theoretical nanoelectronics and computational nanotechnology. The aim for DTU Nanotech is to secure the department's leading position and excellence in computer simulation and theory of nanoelectronics.

### Responsibilities and tasks

DTU Nanotech therefore seeks a professor with expertise in the following areas:

- Computer simulation and theory of nanoelectronics.
- Development of computational tools and methodology for atomistic transport simulations.
- Theory related to on-going experimental activities at DTU such as e.g. graphene-based electronic nano-devices, and nano-biosensing based on nanowires.
- Industrial collaboration in computational nanotechnology/nanoelectronics.

The professor will be affiliated with present activities and is expected to participate actively in international as well as national collaborative projects. The professor is expected to establish relations to other research groups at DTU working with related topics.

The successful candidate is expected to take a lead position in teaching at the bachelor-, master- and PhD levels.

#### Qualifications

Candidates should already have obtained well-documented international recognition within their research field. Employment implies original research at the highest international level within all of the above mentioned research themes.

The successful candidate must be able to document substantial experience with teaching at the B.Sc., M.Sc. and PhD levels in micro- and nanotechnology.

### 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

For the specific position consideration will also be given to:

• the ability to instigate new teaching activities

- experience with outreach activities
- experience with international collaborations
- experience with industrial collaborations
- experience in cross-disciplinary research

# 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 Mogens Rysholt Poulsen, tel.: +45 45255757.

You can read more about DTU Nanotech on www.nanotech.dtu.dk

# **Application procedure:**

Please submit your online application no later than **XXX 2014**. Apply online at <a href="https://www.career.dtu.dk">www.career.dtu.dk</a>.

Applications must be submitted as **one 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
- C\
- List of publications indicating scientific highlights
- Documentation of teaching experience
- A plan for future research

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

DTU is a technical university providing internationally leading research, education, innovation and public service. Our staff of 5,700 advance science and technology to create innovative solutions that meet the demands of society; and our 10,000 students are educated to address the technological challenges of the future. DTU is an independent academic university collaborating globally with business, industry, government, and public agencies.