

## Professor (with special responsibilities) in Corrosion and Surface Engineering

DTU Mechanical Engineering at the Technical University of Denmark invites applications for a position as Professor (with special responsibilities) in Corrosion and Surface Engineering.

DTU Mechanical Engineering contributes to research, innovation and education within the following scientific areas: Structural and solid mechanics, fluid and hydrodynamics, applied thermodynamics, manufacturing technology, engineering design and product development, materials- and surface engineering. The staff consists of 270 persons including a faculty of 55. The professor will be affiliated to the Section for Materials and Surface Engineering which is one out of six sections in the department.

### Responsibilities and tasks

The position covers research, innovation and teaching. These duties will be adjusted to the function-specific duties associated with the position.

Applicants must have documented expertise in the following fields:

- Experimental electrochemical methods for characterization of corrosion performance at macro- and micro-scale
- Application of microscopical and spectroscopical techniques for materials characterization, particularly with respect to environmental corrosion
- Surface engineering of light metals
- Corrosion engineering of light metals and electronic materials

The successful candidate is expected to have extensive relations to other relevant (inter)national research groups in academia and industry. The new professor is also expected to establish relations to other relevant research groups at DTU working in materials and surface engineering.

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.

Responsibilities as project manager as well as active participation in acquiring external financing are mandatory. Furthermore, the successful candidate is expected to contribute to a continuous expansion of national and international networking activities.

The professor is expected to participate in teaching at the bachelor-, master- and PhD levels.

A position as Professor with Special Responsibilities is held for a limited time period and involves all the usual duties associated with a full professorship, as well as fixed-term specific duties which will vary according to the research program.

### Qualifications

The qualification requirements correspond with those for ordinary professorships.

The candidate should have a very strong scientific background in materials science and engineering, in particular in surface engineering of light metals and corrosion engineering of light and electronic materials.

Achievements are expected in extension of the position's qualification requirements, which are:

- Extensive original scientific output at international level in surface engineering of light metals and corrosion engineering of light and electronic materials
- Documented experience in one, preferably more, of the following three fields:
  - Research leadership, including management tasks in national or international projects, research programmes, conferences, etc.
  - Teaching experience at different academic levels, and the potential for providing accomplished teaching.
  - Innovation, including the advancement of patent areas, the application of research results in commercial contexts, etc.

Experience with management of a medium-sized research team is essential and the applicants are expected to have a good track record in attracting external funding for research and innovation.

### **Assessment**

In the assessment of the candidate consideration will be given to

- the candidate's qualification for handling the special, function-related assignment(s) that are associated with the position
- scientific production at international level, research potential and ability to lead and develop a research team
- the ability to teach
- 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
- the ability to attract funding to the research area
- visions within the research area

### **Salary and appointment terms**

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 available for a 5-year period and may be extended for up to 3 years more.

### **Further information**

Further information may be obtained from Head of Department Henrik Carlsen, tel.: +45 4525 4171.

You can read more about the Department of Mechanical Engineering on [www.mek.dtu.dk](http://www.mek.dtu.dk)

### **Application procedure:**

We must have your online application by **XXX 2013**. Apply online at [www.career.dtu.dk](http://www.career.dtu.dk).

HR Rekruttering

Sidst revideret: Marts 2013

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
- CV
- 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.