

Full Professor of Metals for Extreme Conditions

Engels -- Faculty/department Mechanical, Maritime and Materials Engineering
Level PhD degree
Maximum employment Maximum of 38 hours per week (1 FTE)
Duration of contract Tenured
Salary scale €4.904 to €8.622 per month gross

Mechanical, Maritime and Materials Engineering (3mE)

The Faculty of 3mE educates committed engineers and Ph.D. graduates and conducts breakthrough scientific research in the fields of mechanical engineering, maritime engineering and materials science and engineering. The position of the Department of Materials Science and Engineering (MSE) within the faculty is to focus on materials requirements related to a wide variety of engineering application fields. Possibilities and limitations of metals in highly demanding applications significantly affect the design of sustainable products, equipment and structures, which forms a direct link between MSE and the other departments within the faculty.

The research and education of the department of MSE is concentrated around 15 senior scientists, each prominent in a field of expertise concerning the understanding and control of materials properties from the fundamental to the applied level. These expertise fields encompass primary processing, thermo-mechanical treatments of metals, mechanical behavior, joining, fracture mechanics, corrosion and recycling.

Metals for Extreme Conditions is a new chair around which a research group will be constructed. Typically one assistant and one associate professor will be expected to work within the structure of the new group.

Job description

The department of MSE seeks a motivated candidate of high academic quality to strengthen the research activities in the field of Metals for Extreme Conditions who will also contribute to the educational program at a graduate and postgraduate level. The field of the new chair will address microstructural requirements and microstructure-properties relationships of metal applications in harsh environmental conditions.

The new appointee to the chair Metals for Extreme Conditions is expected to develop and undertake a research program in one or more of the following themes: production innovation, applications-related aspects such as energy generation, deep sea exploration, explosive loading, nuclear irradiated materials, replacement of scarce elements in alloy property design or other relevant subjects. The specific focus of the research within these fields will depend upon the expertise and interest of the successful candidate. It is expected that the successful candidate will develop activities in both experimental and theoretical aspects of materials science.

Skills and qualifications

It is important that the appointee builds a high impact and high visibility research group that will become successful in finding materials solutions to relevant global

scientific and societal challenges. We seek a candidate with the following skills and qualifications:

- High academic quality and a proven record of scientific excellence.
- A pronounced research vision in the field of Metals for Extreme Conditions.
- Commitment to the acquisition of external financial support for the research program: a proven track record on fund raising is crucial.
- Good networking and communication skills.
- A stimulating leader for the scientific staff, technical assistants, junior researchers and students, with the ability to create a cooperative work environment focused on high quality research and education.
- Commitment to set up cross-disciplinary collaborations.
- Experience in teaching, including the supervision of Ph.D. and master students.
- Demonstrated ability in written and spoken English is required, as well as a willingness to learn Dutch.

Whilst the appointment will be made on the basis of academic excellence, preference will be given to candidates with proven managerial skills.

Conditions of employment

TU Delft offers an attractive benefits package, including a flexible work week and the option of assembling a customised compensation and benefits package (the 'IKA'). Salary and benefits are in accordance with the Collective Labour Agreement for Dutch Universities. The starting salary of the Professor depends on prior knowledge and experience and varies from scale H2 to H1 (€ 4.904,- with a maximum of € 8,622,- gross per month).

TU Delft sets specific standards for the English competency of the teaching staff and offers training to improve English competency if required.

Information and application

For more information about this position, please contact Dr. J.M.C. Mol, phone: +31 (0)15-2786778, e-mail: J.M.C.Mol@tudelft.nl. To apply, please e-mail a detailed CV along with a letter of application by 20 April 2013 to: application-3mE@tudelft.nl. When applying for this position, please refer to vacancy number 3ME12-35.