

Within the Faculty of Science & Technology (TNW) at the University of Twente, some 700 staff members and more than 1100 students are involved in training and research areas spanning chemical technology, applied physics and biomedical technology. Fields of application include sustainable energy, process technology, materials science, nanotechnology and technical medicine. The research enjoys a high profile in the Netherlands as well as abroad and is coordinated within the multidisciplinary research institutes IMPACT, MESA+ and MIRA. The faculty collaborates intensively with industrial and academic partners world-wide and conducts extensive research for external commissioning parties and funding agencies. Energy, Materials and Systems (EMS) is one of the TNW chairs.

We seek to strengthen the research effort in EMS by opening a

TENURE-TRACK POSITION IN CRYOGENIC COOLING TECHNOLOGIES

The research of EMS is application-oriented and greatly benefits from its internationally recognized expertise and unique infrastructure on applied superconductivity and cryogenics. The main focus is on sustainable energy, with the ambition of developing technologies, materials and systems that will play a key role in our future energy chains. The research is embedded in the IMPACT institute. EMS investigates superconducting devices in the electrical power grid (e.g. superconducting power cables), as well as cryogenic technologies and materials for liquid energy carriers such as liquid natural gas and hydrogen. The group has an excellent track record in international pioneering projects on sustainable energy (such as ITER on nuclear fusion), but also in non-energy related but challenging projects at CERN and ESA.

Activities

Within EMS, the candidate will lead a research team of around 10 persons including students. In the team a number of projects are running with currently 3 PhD students. The candidate will operate as a daily supervisor of these students and actively coordinate the running projects. Also, the candidate will set up new research projects embedded in EMS. An aptitude for funding acquisition and financial management are important in this respect.

Profile

We are looking for a candidate with a PhD degree in physics or a related discipline that has built up appreciable expertise as a post-doc researcher in instrumentation, thermodynamics and preferably cryogenics. Also, the candidate needs to be skilled with software packages and numerical tools for simulation purposes. The candidate needs to have a proven publication- and presentation track record. Good communication skills are essential, while teaching experience is recommended.

Appointment and salary

You will be appointed in a Tenure Track position [in accordance with Clause 6.5a of the Collective Labour Agreement - Dutch Universities] or a position as an aspirant professor. A Tenure Track contract enables you to direct your own career based on fixed performance agreements, in which context promotion from UD (university lecturer) to UHD (senior university lecturer) and subsequently to professor is possible. A definitive assessment will take place no later than five years after commencement of the employment, following which employment for an indefinite period may be agreed upon.

Information

For more information, please contact Mr Prof.dr.ir. H.J.M. ter Brake, h.j.m.terbrake@utwente.nl, tel. 053-4894349. Applications, including a CV can be sent to Universiteit Twente, Attn Mrs S. Prent, Faculteit Technische Natuurwetenschappen, Postbus 217, 7500 AE Enschede or via email address PenO@tnw.utwente.nl. Applications have to be received by August 16th at the latest.