

The Interfaces and Correlated Electron Systems research cluster of the University of Twente advertises a:

TENURE-TRACK POSITION IN APPLICATIONS OF NOVEL ELECTRONIC MATERIALS

The Interfaces and Correlated Electron Systems (ICE) research cluster of the Faculty of Science and Technology and the MESA+ Institute for Nanotechnology at the University of Twente focuses on new materials and devices with unconventional electronic/magnetic properties, spanning the range from fundamental understanding to thin film fabrication, characterization and applications. Current materials of interest include transition metal oxides and their interfaces, superconductors, and 3D topological insulators. The instrumentation park involves various thin film deposition systems, especially based on pulsed laser deposition, and several cryogenic characterization facilities including scanning SQUID microscopy. Within MESA+, we have access to world-class cleanroom facilities and close collaboration with many of the other participating research groups.

Activities

The successful candidate will lead an independent research effort in areas that complement and enhance the cluster's existing activities, especially oriented towards novel applications of electronic materials. Possible research directions of interest are new inorganic materials and devices for energy harvesting, novel concepts for low-power information processing, and sensitive sensing devices. Supported by the embedding in the ICE research cluster and the MESA+ Institute, he/she will develop his/her own research line, secure external funding, supervise the junior scientists associated with his/her projects, and contribute to the overall intellectual life of the cluster. He/she will further participate actively in the faculty's teaching activities.

Profile

We are looking for candidates with:

- an outstanding research track record in advanced materials research,
- compelling ideas for application-oriented research based on novel materials and/or devices,
- affinity with the fundamental physics of electronic/magnetic materials and devices,
- the ability to communicate effectively and inspire students and co-workers, and
- the aptitude and drive to conduct exploratory, pioneering research.

Appointment and salary

You will be appointed to a Tenure Track position [in accordance with Clause 6.5a of the Collective Labour Agreement - Dutch Universities]. A Tenure Track contract enables you to direct your own career based on fixed performance agreements, in which context promotion from UD (assistant professor) to UHD (associate professor) and subsequently to professor is possible. For candidates with appropriate experience, an initial appointment at UHD level is also possible. A definitive assessment will take place no later than five years after the commencement of employment and, subject to a positive outcome of this review, employment for an indefinite period will be granted.

Information

For more information, please visit www.utwente.nl/tnw/ice or contact Prof. Hans Hilgenkamp, h.hilgenkamp@utwente.nl, tel. +31-(0)53-4892806. Applications, including a CV, a research plan and contact information for 3 or more references, should be uploaded via www.utwente.nl/vacatures/en. Review of candidates will start on March 15, 2012, and short-listed candidates will be invited for an interview in the course of April-May 2012 .