**TEM post-doctoral research position (100%) at IMAP/EMAT (Belgium)**

The Institute of Materials and Process Engineering (IMAP) of the Université catholique de Louvain (UCL) and the Electron Microscopy for Materials Science (EMAT) research group of the University of Antwerp are looking for a post-doctoral researcher to support various and mutual projects on transmission electron microscopy characterisation and nano-mechanical testing of novel metallic and metallic-based materials. Examples of materials include high-entropy alloys and aluminium alloys-based processed by friction stir and involving multi-material (steel, Mg, oxides, NiTi, ...) interfaces.

The candidate needs to be trained in high resolution (scanning-) transmission electron microscopy techniques (TEM and STEM), including aberration corrected microscopy and have experience in in-situ nano-mechanical experiments. Hands-on experience with Titan, Osiris and Tecnai instruments is useful, as well as with Hysitron pico-indentor PI95 sample holder and Nanomegas ASTAR orientation imaging including TopSpin strain mapping. Knowledge on behaviour of defects in materials under mechanical loads is important.

Most of the research will be performed on materials produced and treated in UCL, the microscopy will be performed at EMAT in Antwerp, both located in Belgium. Also selected topical investigations initiated at EMAT will be included as well as support for Master and PhD students.

**Profile and requirements**

* you hold a doctorate degree (PhD) in Physics, Materials Science, Materials Engineering or similar;
* you understand and have experience in high resolution (scanning-) transmission electron microscopy techniques (TEM and STEM), including aberration corrected microscopy and in-situ nano-mechanical experiments;
* you have deep knowledge on behaviour of defects in materials under mechanical loads;
* you have published in high impact factor journals with referee system;
* you have experience in paper and project writing and in presenting your work at international conferences;
* experience in guiding Master and PhD students is welcome;
* you are proficient in English;
* you are quality-oriented, conscientious, creative and cooperative.

**We offer**

* two exciting research environments at top laboratories on materials engineering and electron microscopy;
* a full-time scholarship as post-doctoral researcher for 2 years (with an evaluation after 1 year), possibly to be prolonged;
* a gross annual scholarship ranging from 29.544 and 34.620 € depending on years of experience and country of origin (taxes between 1.500 and 5.000 € depending on status);
* the date of appointment will be as soon as possible.

**How to apply?**

* Applications can be submitted until the closing date **31 March 2017**;
* A pre-selection will be made from amongst the submitted applications. The remainder of the selection procedure will be determined by the selection panel;
* To apply send your CV to Prof. Hosni Idrissi hosni.idrissi@uclouvain.be and Prof. Nick Schryvers nick.schryvers@uantwerpen.be .