

TEM post-doctoral research position (100%) at UCLouvain (Belgium)

The Institute of Materials and Process Engineering (IMAP) of the Université catholique de Louvain (UCLouvain) is looking for a post-doctoral researcher to support various projects on transmission electron microscopy characterization of novel metallic and metallic-based materials. Examples of materials include high-entropy alloys and aluminium alloys-based processed by friction stir additive manufacturing and also possibly involving multi-material (steel, Mg, oxides, ...) interfaces. The candidate needs to be trained in high resolution (scanning-) transmission electron microscopy techniques (TEM and STEM), and have experience in STEM-EDX and automated crystallographic orientation mapping in TEM (ACOM-TEM). Hands-on experience with in-situ TEM experiments including heating, cooling, straining or with gas will be appreciated. Knowledge on behaviour of defects in materials is also important.

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 TEM and STEM, STEM-EDX, ACOM-TEM and in-situ TEM;
- You have deep knowledge on behaviour of defects in materials;
- 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;
- You have experience in guiding Master and PhD students is welcome;
- You have an excellent proficiency in English;
- You are quality-oriented, conscientious, creative and cooperative.

We offer

- An exciting research environment at top laboratory 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 3200 € and 3700 € depending on years of experience and country of origin;
- The contract is expected as soon as possible (considering visa delay)

How to apply?

- Applications can be submitted until the closing date 30 Sept 2024;
- 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). You will be co-supervised by Prof. Aude Simar at UCLouvain.