**Centre for Electron Microscopy and Materials Analysis (EMMA)**

*University of Huddersfield, United Kingdom*

**Fully-Funded PhD Studentships Starting in January 2018**

The EMMA Centre welcomes applications for fully-funded PhD studentships (fees paid plus a tax-free stipend of £14,553 per year for three years) for high-calibre graduates who hold a minimum of an upper-second class degree (or equivalent) in engineering or the physical sciences who are interested in studying radiation damage in any of the following areas:

* Nuclear materials
* Materials for space
* Semiconductors
* Nanomaterials and nanotechnology
* Thin films and coatings

We also welcome applications for research projects in any other areas which are appropriate to the research interests of the EMMA Centre.

The EMMA centre is a world leader in the study of radiation damage in materials using electron microscopy and related techniques. At the heart of our activities is the Microscopes and Ion Accelerators for Materials Investigations (MIAMI) facility which allows materials to be irradiated *in situ* within a transmission electron microscope (TEM). We use MIAMI to observe the internal structure of a sample at the nanoscale as it is being bombarded with energetic ions at a range of temperatures. This research has relevance to the performance of materials in nuclear reactors and in space; to semiconductor manufacture; to the development of nanotechnology; and to the advanced treatment of surfaces with various types of physically-deposited coatings.

EMMA was established at the University of Huddersfield in 2011 and we are now in a very exciting period as we recently completed the construction of MIAMI-2 which combines a new 300 kV TEM with two ion accelerators having been awarded £3.5M by the Engineering and Physical Sciences Research Council (EPSRC).

We have an extensive network of collaborators including the Universities of Oxford, Manchester, Sheffield, Birmingham, Surrey and Imperial College in the UK, the Universities of Illinois, Tennessee and Purdue in the USA and international laboratories including Commissariat à l'Énergie Atomique in France and Oakridge in the USA.

**How To Apply**

Please send your CV and cover letter to emma-phd@hud.ac.uk by Friday 1st September 2017.

**Website**: www.hud.ac.uk/emma