

Title: Postdoctoral Research Assistant/Associate in Analytical Electron Microscopy of Nanostructured Heusler Alloys for Thermoelectric Applications

Reference: 011747

Location: School of Physics & Astronomy, University of Glasgow, UK

Salary Range: £27,328 - £30,738/£33,574 - £37,768

Closing date: 9 Dec. 2015

Description

Applications are invited for a three-year postdoctoral post in analytical electron microscopy. You will contribute to the project “*Nanostructured half-Heuslers for thermoelectric waste heat recovery*” working with Dr Donald MacLaren in collaboration with Dr Jan-Willem Bos of Heriot-Watt University and Professor Keith Refson at Royal Holloway University. The post requires expert knowledge in analytical electron microscopy and/or thin-film deposition, and will require a willingness to develop methodologies for the analysis of inelastic electron and neutron scattering from nanostructured materials.

This EPSRC-funded project will be conducted in close collaboration with a similar appointment at Heriot-Watt University, which will focus on the exploration of bulk nanostructured half-Heusler thermoelectric materials that will then be analysed in Glasgow. As part of the Materials and Condensed Matter Physics group, you will have access to substantial facilities for electron microscopy and sample preparation, including our flagship aberration-corrected (probe) JEOL ARM200cF, equipped with a Gatan Quantum electron energy loss spectrometer. Substantial use of national facilities for neutron scattering ([ISIS](http://www.isis.stfc.ac.uk), <http://www.isis.stfc.ac.uk>) and electron microscopy ([SuperSTEM](http://www.superstem.org), <http://www.superstem.org>) are also anticipated. The project will culminate in the fabrication of a prototype thermoelectric module, in collaboration with [European Thermodynamics Ltd](http://www.europeanothermodynamics.com) (<http://www.europeanothermodynamics.com>)

More information

Details of the staff, research, equipment and publications of the Glasgow Materials & Condensed Matter Physics Group are available here:

<http://www.gla.ac.uk/schools/physics/research/groups/mcmp/>

For a full job description and details of the application process, apply here:

<http://www.gla.ac.uk/about/jobs/vacancies/> and search for reference 011747.

The School of Physics and Astronomy has been awarded Juno Champion status and also the Athena SWAN Silver Award. The University is committed to equality of opportunity in employment. The University of Glasgow, charity number SC004401.

Contact

Informal enquiries can be directed to Dr. Donald MacLaren,
email: donald.maclaren@glasgow.ac.uk.

