Research Project: Control of Crystal Nucleation on Surfaces

This position is one of two postdoctoral positions funded by a £1 million Engineering and Physical Sciences Research Council (EPSRC) grant to study crystal nucleation from vapour, from liquid and from solution on surfaces. State-of-the-art techniques will be used to fabricate nanoscale surface features such as pits, grooves and trenches with undercuts. The project will relate the density and rate of crystallisation of different substances to the type of feature and will use these findings to establish criteria for the design of good nucleants, or crystallisation promoters. The breadth of the experiments will establish the extent to which optimisation of nucleation by surface features differs between vapour, liquid and solution and the differences between systems of simple organic molecules, water, and inorganic salts (electrolytes).

You will work as part of a collaborative team involving researchers from the School of Physics and Astronomy, the School of Chemistry and the School of Earth and Environment. You must hold, or have submitted a thesis for an experimental PhD degree (or equivalent) in Physics, Chemistry, Materials Science, or a related discipline, and have experience in experimental research on crystallisation. The ability and willingness to travel overseas and attend conferences is also essential.

The University of Leeds' commitment to women in science has been recognised with a national accolade. The University has received the Athena Swan Bronze Award in recognition of our success in recruiting, retaining and promoting women in Science, Engineering and Technology (SET). The Faculty of Environment are in the process of preparing an application for an Athena Swan award to recognise our commitment and work in these areas.

The University also offers family friendly policies including generous maternity and paternity leave; full details of the policies can be found here http://hr.leeds.ac.uk/homepage/4/policies.

University Grade 6 (£25,513 to £30,434 p.a.) or University Grade 7 (£31,342 to £37,394 p.a.) depending upon qualifications and relevant experience. The salary spine point is subject to external funding conditions which will limit the starting salary to £31,342 p.a.

For informal enquiries, please contact Dr Hugo Christenson, email h.k.christenson@leeds.ac.uk

Closing Date: October 19, 2014

Ref: ENVEE1010

Click here for further information about working at the University of Leeds <www.leeds.ac.uk/info/20025/university_jobs>