

De Montfort University

Graduate School Full Bursary PhD Scholarship

Smart Window design for Sustainable Buildings

Institute of Engineering & Sustainable Development
School of Engineering, Faculty of Technology
De Montfort University, Leicester

COMMENCING OCTOBER 2017

A PhD research scholarship including stipend and tuition fee costs is offered within the area of sustainable development in the School of Engineering. It is available to UK or EU students who are suitably qualified and have outstanding potential as a researcher.

In offering this scholarship the University aims to further develop its proven research strengths in energy efficiency and sustainability. School of Engineering & Sustainable development has developed over 30 years to create the knowledge, skills and technology necessary to enjoy a more energy-efficient and sustainable lives It is an excellent opportunity for a candidate of exceptional promise to contribute to a stimulating, world-class research environment.

The project will deal with a novel concept of developing the vacuum glazed windows without any heat loss through conduction in pillars. As there will be no pillar between the glasses, it will eliminate the conduction heat loss and thus significantly pushing the current efficiency limits of vacuum glazing. As our proposed design eliminates the pillars in the design, higher vacuum pressure and thus more heat insulation can be achieved which was not possible otherwise.

This research will also explore the possibility of integrating stretchable electronics to display energy efficiency of window in real time to the user. We envisage that the use of magnetic separation and 'smart mirror' concepts in window design will enable us to set a world record for heat insulation of windows for energy efficient windows.

For a more detailed description of the scholarship, the subject area at DMU and an application pack please visit <http://www.dmu.ac.uk/research/graduate-school/phd-scholarships.aspx> . Please direct academic queries to Dr Farukh on +44 (0)116 257 7028 or email f.farukh@dmu.ac.uk For administrative queries contact the Graduate School office email: researchstudents@dmu.ac.uk, tel : 0116 250-6309.

Completed applications should be returned together with two supporting references and an academic transcript.

Applications are invited from UK or EU students with a Master's degree or good first degree in a relevant subject (First, 2:1 or equivalent). Doctoral scholarships are available for up to three years full-time study commencing in October 2017 consisting of a bursary of £14,296 per annum in addition to waiver of tuition fees.

Please quote ref: TECHFB3

CLOSING DATE: Tuesday 6th June, 2017. Interviews for shortlisted candidates will be held by Friday 16th June approximately.