PhDs in Earth Systems Science and Computational Climate Modelling

Univeristy College Dublin - UCD Earth Sciences Institute

Brief Project description
Earth Systems Science and Computational Climate Modelling is part of the PhD Programme in Earth and Natural Sciences at UCD. The programme aims to train Earth Scientists in the disciplines needed to propose quantitative and innovative solutions to rapidly emerging climate challenges. The possible doctoral project areas include:
- Real-time determination of the properties of deep (remote) in situ earth fractures
- Modelling the thermal structure of onshore Ireland and its offshore basins
- Modelling of joint patterns within multi-layered rock masses
- Biomineralisation and Isotope Proxies for Environmental Change
- Numerical modelling of Ocean-Land coupling: Assessing ocean wave energy potential from land-based observations
- A Laplace-Transform Integration Scheme for Climate Modelling
- Storms as future geohazards
- The impact of climatic and oceanographic changes on geohazards in the Rockall Trough
- Discrete Element Method (DEM) modelling of the kinematic evolution of submarine Landslides
- Cleaner Air - A Warmer Europe?

For more detailed information on the opportunities, supervisors and collaborators visit the website.

Background

The Fellowships are available at the Earth Systems Insitute at University College Dublin, Ireland (UCD), under the PhD Programme in Earth and Natural Sciences. The programme brings together brings together research leaders, policy-makers, and industry across a wide range of relevant disciplines and expertise at UCD and its national and international partner institutions.
Building on the concept that energy and environment are co-dependent, the programme draws on the unique range of disciplines and technologies of UCD and its partners to create new opportunities in earth and natural sciences education. Graduates of the programme will have a strong background in energy and environment studies, and will have the innovation and entrepreneurial skills to develop an emerging green technology sector. As part of their studies, all researchers will take a Graduate Certificate in Innovation and Entrepreneurship at the Innovation Academy.

Training will prepare the student for industry, academia and government agencies where they will contribute to the emergence of a global reputation, the national deployment of green technology and sustaining the competitiveness of Irish and global industry. Graduate training will draw on and embed students in strong disciplines and multidisciplinary teams of specialists working on thematic research areas.

These positions are funded under the Programme for Research in Third-Level Institutions, Cycle 5.

Keyword Tags

UCD, Univeristy College Dublin, Ireland PhD, mathematics, computational science, geology, geophysics, glaciology, atmospheric physics, hydrology, climatology, modelling

Website

http://www.ucd.ie/earth/graduatetraining/phdprogrammeineartheandnaturalsciences/earthandnaturalsciencesphdprojects/

Terms and conditions
Postgraduate Studentships are for a 4-year structured PhD - Annual stipend
€16,000 with an allowance for research travel and expenses
EU fees are funded for four years. Non-EU candidates will be liable for fees
Evidence of proficiency in English (where appropriate)

Further info/apply

Informal enquiries directly to the Principal Investigator outlined on the website.

Fully completed applications (including Application Cover Form (see website), CV, letter of Motivation, Certified copies of academic transcripts and Evidence of proficiency in English where appropriate) should be emailed to both the Principal Investigator for the specific project and to ens_phd@ucd.ie.

More info at:
http://www.ucd.ie/earth/graduatetraining/phdprogrammeinearthislandnaturalsciences/applyingforaphdposition/

Closing date for application

First round applications by 13 May 2011.

Start date

These positions are due to commence in the session 2011/12. Specific start dates are negotiable.