

#### University of Limerick PhD Fellowship Opportunity

Investigation into peat properties influencing greenhouse gas emissions

# **Background**

Greenhouse gas (GHG) fluxes in peatlands are spatially and temporally variable and highly sensitive to natural and anthropogenic perturbations. Over 80% of peatlands in the Republic of Ireland have been modified to some extent and their climate footprint is strongly dependent on their management. Pristine peatlands are generally net sinks for carbon dioxide and sources of methane. However, land use change produces radical changes in the magnitude and direction of these fluxes, which are driven by a range of variables (e.g. hydrology, vegetation, soil properties etc.). AUGER (peAtland properties inflUencing greenhouse Gas Emissions and Removals) is a project funded by the Environmental Protection Agency, led by University College Dublin with partners in University of Limerick, Trinity College Dublin, Queen's University Belfast and Earthy Matters Environmental Consultants. This PhD Fellowship will characterise the biogeochemical and physical characteristics of peatlands, identify potential information gaps and identify critical factors influencing GHG fluxes. This will involve mainly a nationwide peatland survey of physical, chemical and ecological parameters of peatlands and peat soils.

### **Essential**

Applicants should have an upper second class or first class honours primary degree or M.Sc. in an appropriate discipline (e.g. Plant Science, Ecology, Environmental Science, Environmental Engineering, etc.). The successful candidate should be highly self-motivated and be prepared for extended periods of field work in remote locations, usually alone. Candidates must be prepared to work under flexible conditions, including data collection over weekends / bank holidays, where necessary. A full EU driving licence and EU citizenship is also required.

## **Desirable**

Additional desirable characteristics would include a familiarity with peatlands and environmental monitoring. Experience of environmental modelling would also be a distinct advantage. Information literacy and oral, written and graphical communication skills are important to this role.

## **Award**

The student will be based and registered at the Department of Life Sciences in the University of Limerick working under the supervision of Dr. Ken Byrne and Dr. Florence Renou-Wilson (University College Dublin). The Fellowship will start as soon as possible after 1<sup>st</sup> of July 2016 when the most suitable candidate is appointed.

The fellowship provides an annual stipend of €16,000 plus registration fees for three years.

#### **Application Procedure**

Submit an electronic copy of Curriculum Vitae in pdf format and a letter of interest simultaneously to: Dr Ken Byrne (ken.byrne@ul.ie) and Dr Florence Renou-Wilson (florence.renou@ucd.ie).

### Closing date

10<sup>th</sup> June 2016