



## FUNDED PH.D. STUDENTSHIP

### Emerging organic contaminants arising in rural environments: investigations in karst and fractured bedrock aquifers

The aim of this project is to investigate the occurrence of synthetic organic compounds arising from rural activities in Irish karst and fractured bedrock aquifers. The primary focus will be on the loss to groundwater of veterinary drugs used in Irish agriculture, particularly anti-parasitic drugs including anthelmintics, coccidiostats and pyrethroids, which represent the most widely used veterinary drugs in Irish agricultural production. The project will investigate the frequency of occurrence of different compounds and the relationship to their chemical characteristics. It will aim to determine both source factors (e.g. animal waste storage, landspreading, grazing and feeding locations) and pathway factors (e.g. characteristics of soil, Quaternary deposits and bedrock) involved in contaminant detections. This is a joint project between Trinity College Dublin and Teagasc through the Walsh Fellowship Scheme and it forms part of the Groundwater Spoke of the Irish Centre for Research in Applied Geosciences (iCRAG) (<http://icrag-centre.org/>). The iCRAG Centre is funded under the SFI Research Centres Programme and is co-funded under the European Regional Development Fund together with industry partners.

**Requirements:** Applicants should have a good primary degree (II<sub>1</sub> or I) or M.Sc. in an appropriate discipline (Environmental Chemistry, Environmental Science, Agricultural Science, Earth Science, Hydrogeology etc.). Chemical analytical experience is essential and experience in chromatographic techniques and mass spectrometry would be highly advantageous. A full EU driving licence is required.

**Starting date and funding:** The project will start in September 2015. The funding is for a four year structured Ph.D. project, to be completed by end of August 2019. The project is open to EU students only (students who have been resident for 3 out of the last 5 years in the EU) and includes fees and a tax-free stipend of €18,000 per annum. Final appointment of the successful candidate is dependent on funding being finalised.

Further information on the position and application procedure can be obtained by emailing Prof. Catherine Coxon, Department of Geology, School of Natural Sciences, Trinity College Dublin, email: [cecaxon@tcd.ie](mailto:cecaxon@tcd.ie). The closing date for applications is **8<sup>th</sup> May 2015**.

