



Trinity College Dublin

Coláiste na Tríonóide, Baile Átha Cliath

The University of Dublin

Trinity College Dublin

Department of Civil, Structural and Environmental Engineering

PhD studentship

THE CARBON DYNAMICS OF RAISED AND CUTOVER BOGS

A PhD researcher is sought to join a 3 year EPA-funded project with the aim to evaluate the ecosystem services of peatlands in Ireland and develop a framework that outlines the methodology and actions to be undertaken when attempting to restore degraded peatlands to active peat-forming conditions. The project will identify and quantify current environmental pressures and future trends on ecological and water resources as well as the atmosphere / climate associated with such peatland ecosystems. The PhD research aspect of the project will involve quantifying the linkage between eco-hydrology and carbon dynamics of raised and cutover bogs (using primary field data), estimating a carbon balance and emission factors for active and degraded raised bogs and then modeling the carbon flux dynamics in order to predict GHG emissions under current and future climates.

An outstanding student with an interest in the generation of greenhouse gases as well as the eco-hydrology of wetlands is required. Applicants should have a strong motivation and demonstrate ability in both field work and numerical modelling areas of research. In addition, the successful applicant will be required to liaise with the EPA, NPWS and landowners and will need good communication skills. Applicants should preferably possess a first class honours degree in Engineering/Science or other relevant discipline. The researchers will be based within the Environmental Engineering Research Group of the Department of Civil, Structural and Environmental Engineering. The PhD studentship covers academic fees (EU level) and subsistence of €14,000 per annum. The studentship is due to start between April and September 2015.

Interested candidates should send a 3-page CV and covering letter to the contact addresses below. The closing date for receipt of applications is 12 noon, **Sunday 8th March 2015**.

Laurence Gill & Shane Regan
Department of Civil, Structural and Environmental Engineering
Trinity College, Dublin 2, Ireland

Email: laurence.gill@tcd.ie & regans@tcd.ie
Telephone +353-1-8961047