IRECCSEM Evaluating Ireland's potential for onshore carbon sequestration and storage using electromagnetics



Post-Doctoral Fellowship and PhD Studentship in Carbon Sequestration Research at the Dublin Institute for Advanced Studies

The Dublin Institute for Advanced Studies invites applications for a 2-year Post-Doctoral Fellowship and a 4-year PhD studentship to undertake carbon sequestration research within an exciting, new research initiative - IRECCSEM (www.ireccsem.ie). IRECCSEM aims to develop, through innovative research, an understanding of Ireland's (all-island) carbon sequestration potential through integrated modelling of new and existing geophysical and geological data, supported by the development of new multivariate modelling and inversion software tools. The research will be spearheaded by electromagnetic methods, principally magnetotellurics.

For the Fellowship we are seeking geophysicists experienced in either (i) magnetotellurics or (ii) carbon sequestration research, and preferably both, with skills in one or more of the following areas: multivariate data analysis; numerical and inverse code development; investigation and modelling of geophysical and petrophysical relationships (particularly porosity/permeability); geophysical data modelling. Extensive software programming knowledge and experience essential.

For the studentship, we are seeking highly motivated, numerate candidates with excellent academic records (minimum ECTS B grade, Upper-second) from a wide range of backgrounds (geophysics, geology, physics, applied mathematics and computational sciences). Experience in one or more of the following areas would be advantageous: geophysical data modelling (particularly magnetotellurics and controlled source EM), multivariate data analysis, and development of numerical inversion codes. Previous experience in carbon sequestration research, although beneficial, is not essential. Proficiency in English is required. DIAS uses the same minimum criteria as UCD, which can be found at: https://myucd.ucd.ie/admission/english_requirement.ezc?pageID=1415

Both posts require participation in IRECCSEM's extensive field data acquisition programme over two Summers and provide for international travel to major conferences and broad scientific collaboration.

The nominal start dates for the positions are September 1st 2013 for the student, and April 1st 2014 for the Fellow, but these are negotiable.

Applications. Email the following information to geosecretary@cp.dias.ie: (1) cover letter outlining your interest in the project (for PDF, highlight relevant experience and accomplishments), (2) complete CV (with copies of publications or manuscripts submitted), (3) academic transcripts, (4) contact details of minimum three referees, and (5) for PhD non-English first language applicants only, certification of English language proficiency, with IRECCSEM-PDF or IRECCSEM-PhD in the subject line as appropriate.

The Fellowship will be paid on a two year, fixed-term, contract starting at €33,975 plus benefits, with an annual increment. The studentship comes with a tax-free stipend of €18,000 plus fees for four years.

Applications received by 15 April 2013 will be considered first; the positions will remain open until filled. For greater details and more information, please view initially the IRECCSEM web site (www.ireccsem.ie), and then contact Professor Alan G. Jones (alan@cp.dias.ie).