

4 year Funded PhD position in Coastal Erosion Modelling at National University of Ireland Galway (NUI Galway), Ireland

Project Title: Modelling coastal erosion on Ireland's west coast

Project Description: Storms can contribute significantly to morphological changes along coastlines which can in turn adversely impact on the environment and coastal infrastructure. Climate change has led to more frequent and severe storms which will only exacerbate the problem. Understanding the hydrodynamic processes driving such morphological changes is key to effective coastal zone management. The main aims of the project are to ascertain whether coastal erosion/deposition on the west coast of Ireland can be accurately modelled and to investigate the relative contributions of wave action and tidal currents on changing coastal morphology. The research will involve use of a number of coastal modelling softwares including SWAN, EFDC and XBEACH.

The research is funded by Science Foundation Ireland through the [Centre for Marine and Renewable Energy](#) and is a collaborative project between NUI Galway's marine modelling group (Dr Stephen Nash) and coastal dynamics research group (Dr Eugene Farrell) and the COAST engineering research group at University of Plymouth led by Prof Gregorio Iglesias. The successful candidate will be based in NUI Galway but will be expected to spend some time in University of Plymouth as part of the project.

Duration: 4 years. Starting Sept./Oct. 2018.

Funding Details: Annual tax-free stipend of €18,500 (4 years) plus a travel fund to cover short secondments at University of Plymouth and attendance at conferences and workshops.

Requirements: The candidate should have a Bachelors degree, with at least a 2.1 or equivalent, in coastal engineering, or a cognate discipline. The project will require a mix of skills, including mathematical, modelling, programming, simulation, and data/statistical analysis skills. The candidate shall have good communication skills, including the ability to write concise, readable reports, and the ability to interact with other researchers. A Masters degree, or prior experience in coastal / marine modelling is desirable but not required.

Expected start date: September/October 2018

How to apply: Please send a letter of introduction and a current CV, indicating your experience and including the names and contact details of two referees via email to Dr Stephen Nash (stephen.nash@nuigalway.ie). In the subject title of the email please put MaREI PhD Scholarship followed by your surname.

Deadline for applications: Friday 15th June, 2018