

6 month Postdoctoral Research Position - Wave Resource Characterisation

Project Title: Characterising the wave resource at the Galway Bay Marine Energy Test Site

Project Description:

The Galway Bay wave energy test site has been in operation since 2006 and is a core component of the SmartBay Marine and Renewable Energy Test Site. The site has provided test and validation facilities for a number of wave energy devices to date. This project seeks to complete an extensive characterisation of the wave resource at GBTS and package this as a Test Site Resource Description report that can be provided by the site managers (SmartBay and Marine Institute) to site users (e.g. ocean energy device developers) who have need of such information. The characterisation will be based on a 15-year-long dataset of hourly wave conditions produced by a high resolution wave model of Galway Bay. The project will primarily involve statistical analyses of the wave dataset and preparation of a report on the results of same. The resource characterisation will be conducted according to the specifications set out by the IEC (International Electrotechnical Commission) for the assessment of the wave resource (IEC-TS 62600-101: Marine energy - Wave, tidal and other water current converters - Part 101: Wave energy resource assessment and characterisation.

The research is funded by The National Infrastructure Access Programme is funded by the Marine Institute under the Marine Research Programme with the support of the Irish Government.

Duration and expected start date: 6 months. Starting Oct/Nov 2019.

Deliverables: A wave resource characterization report.

Salary Details: Approx. €38,000 per annum

Requirements:

The candidate should have a Bachelors degree, with at least a 2.1 or equivalent in civil/coastal engineering, or a cognate discipline. The project will require a mix of skills including large data manipulation and statistical analysis. The candidate shall have excellent 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.

How to apply:

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

Deadline for applications: Friday 18th October, 2019