



PhD Scholarship in UCD School of Civil Engineering

Position: Applications are invited for a four-year PhD studentship in Hydraulic Engineering. The studentship will start on 01 January 2021.

Description: One fully funded four-year PhD studentship in Civil Engineering (Coastal hydraulics) is available in the UCD School of Civil Engineering starting from January 2021. As engineers struggle to maintain traditional 'hard' sea defences, the application of ecologically-enhanced sea defences has dominated the spotlight, indicative of a desire to use an integrative approach to protect the coasts from the threat of climate change while at the same time, maintaining the biodiversity of the coastal ecosystem. This project will focus on climate change adaptation of critical coastal infrastructures that incorporate ecologically sensitive interventions, the idea being that these interventions may offer the dual benefits of both increasing biodiversity and reducing risk from defence overtopping. The successful candidate will work on the prediction of extreme wave hazards (e.g. wave overtopping, impact loads) along ecologically enhanced sea defences using numerical modelling e.g. XBeach, OpenFOAM (and other open-source models or codes). The project may also require the successful candidate to conduct laboratory experiments in the University of Warwick, United Kingdom. It is anticipated that that of a sensitivity analysis data from the [CLASH database](#) will also form part of the project.

Supervisor: Dr Md Salauddin (Lecturer/Assistant Professor, UCD School of Civil Engineering)

Requirements/Qualifications: Applicants should have a first or upper second-class honours Bachelor's or Master's degree in Civil, Water Resources or Coastal Engineering, or in a relevant field. The candidate should be highly motivated and capable of working both independently and within a team. Strong numerical and analytical skills are desirable as is an ability to communicate scientific research findings. Programming skills are also desirable for this position. Applicants should be willing to spend time in the University of Warwick, UK.

If English is not the applicant's first language, a certificate of English language ability is required. For IELTS, an average score of 6.5 over all components and a minimum of 6.0 in each band on the Academic Version is required. (See UCD's policy on minimum English language requirements [here](#))

Project Duration: 48 Months

Funding and Fees: The successful candidate will receive a stipend of €18,000 per annum, full funding for UCD tuition fees for EU/non-EU applicants.

Application procedure: Applicants should submit their Curriculum Vitae (with names of 2 referees) and a personal statement to md.salauddin@ucd.ie

Application Closing Date: 4 pm on Friday 2nd October 2020 (application will remain open until filled by a suitable candidate)