

Naughton REU FSTEM Application 2023: OFFER OF TRAINING FORM SUMMER 2023

Proposer details:	
Title:	Assistant Professor
Name:	Jennifer Keenahan
Email:	Jennifer.keenahan@ucd.ie
Website:	https://people.ucd.ie/jennifer.keenahan
If your grade does not allow you to supervise students, please supply the name of support PI:	NA

Student required:	
Specify any previous training / experience the student should have:	
Some laboratory-type experience would be an advantage	
Study level (3rd year, 4th year)	either
Any other requirements:	no

Traineeship offered:
Brief job description: (please include (1) type of work, (2) what student should hope to achieve at end of the process, (3) who will supervise student on daily basis (post-doc etc.))
<p>Offshore wind is seen as a critical technology towards decarbonizing electricity demand, offering a solution to the energy crisis and mitigating against adverse climate impacts. When it comes to siting individual turbines on the seafloor, the issue of seabed mobility and the potential for scour development is a significant geohazard and environmental constraint associated with the development of this sector, as well as other engineering infrastructure such as pipelines and cables.</p> <p>Ireland's only offshore wind farm constructed to date, Arklow Bank, experienced scour issues that had a significant impact on the project resulting in the use of rock armor in an attempt to mitigate against further scour and turbine instability. Therefore, pre-empting such issues and identifying the optimum area for placement of defences can increase the viability and longevity of installations, and promote their sustainable development.</p> <p>This project will be based in the Civil Engineering laboratories and will conduct experiments using the flume to assess these concerns. The research will be directly supervised by Dr Jennifer Keenahan from the School of Civil Engineering and Dr Mark Coughlan from the School of Earth Sciences.</p>

Link to research group or supervisor webpage:	https://people.ucd.ie/jennifer.keenahan
Location of lab:	Newstead Block B

Working hours: From the end of May to August (specific dates and weekly hours can be agreed between the PI and the student directly over a 10-week period).	
Number of Weeks offered:	10 (happy to support longer if needed)
Hours per week:	40 (happy to support the right student with deviations on this)
Earliest Start Date possible:	May (if that's stipulated by the Fellowship?) but happy to facilitate earlier/later start
Latest End Date possible:	August (if that's stipulated by the Fellowship?) but happy to facilitate earlier/later start