

## **PhD Scholarship in School of Civil Engineering at UCD**

**Position description:** Applications are invited for a fully funded 3-year PhD position in Geotechnical Engineering. The position starting date is **Sep 2023**.

### **Optimized and Reliable Seabed Anchor Systems for Floating Wind**

**Research project:** The PhD position will involve laboratory testing and numerical simulations of seabed anchors to advance floating wind technologies. The west coast of Ireland, with its strong winds in waters deeper than 50 metres, provides an ideal location for testing floating wind. Additionally, Ireland aims to achieve 30 GW of floating wind capacity by 2050. The research will mainly focus on the Atlantic Marine Energy Testing Site (AMETS), located 16 km northwest of Belderra Strand. As part of this project, the successful candidate will participate in ongoing geological and geotechnical site investigations, perform centrifuge tests on anchor capacity using the facilities at ATU Sligo, and integrate seabed characterization and centrifuge testing data with machine-learning-enhanced numerical simulations to optimize the anchor systems. The candidate will have the opportunity to collaborate with a team of experts in geotechnical engineering, marine geology, and relevant industrial stakeholders.

**Supervisors:** Dr Budi Zhao, Dr Mike Long (Co-supervisor)

**Collaborators:** Dr Mark Coughlan & Dr Jennifer Keenahan (UCD), Dr Pat Naughton (ATU)

**Location:** University College Dublin, Belfield, Dublin 4, Ireland

**Applicant Requirements:** We seek a highly enthusiastic PhD candidate who can independently plan and conduct the research project. Applicants should have a first or upper second-class honours degree in geotechnical engineering, civil engineering or other relevant fields such as mechanical engineering or physics. Excellent written, oral communication skills and a high level of competence in the English language are essential (See UCD's policy on minimum English language requirements [here](#)).

**Stipend & fees:** The successful candidate will receive a stipend of €18,500 per annum and the fully funded tuition fees for EU/non-EU applicants. The position is funded for three years - subject to satisfactory progress.

**Application procedure:** Applicants should submit their CV, transcript, and recommendation letters from two referees as a single .pdf document to [budi.zhao@ucd.ie](mailto:budi.zhao@ucd.ie).

**Application deadline:** 14<sup>th</sup> April 2023



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