

PRIMaRE Summer School 2021

Experimental testing to quantify the performance of tidal turbines 13-17 September 2021, University of Southampton

The University of Southampton's [Energy and Climate Change Division](#) is pleased to be hosting this year's [PRIMaRE Summer School](#), organized jointly with [Cardiff University's Marine Energy Research Group](#). This Summer School is the third in a [series](#) of high level Continuing Professional Development (CPD) programmes run by PRIMaRE partners and will follow hot on the heels of the [European Wave and Tidal Energy Conference in Plymouth](#).

This year, the focus will be on experimental testing and design of marine current turbines and will provide participants with hands-on experience in small groups of:

- Planning flume experiments.
- Operating a circulating flume and varying flow parameters.
- Setting up and using an Acoustic Doppler Velocimeter.
- Obtaining flow profiles.
- Ensuring and improving measurement quality.
- Analysis of flow spectra and turbulence statistics.

In addition, there will be relevant presentations from expert invited speakers on topics including:

- Past, present and future of tidal power.
- Economics and policy support mechanisms for marine renewables.
- Research Council perspectives on marine renewables in the context of Net Zero.
- Ecological, meteorological and oceanographic context of tidal power.
- Getting a full-scale turbine into the sea.
- Lab scale testing of scale turbines, hydrofoils and rotor disk simulators.

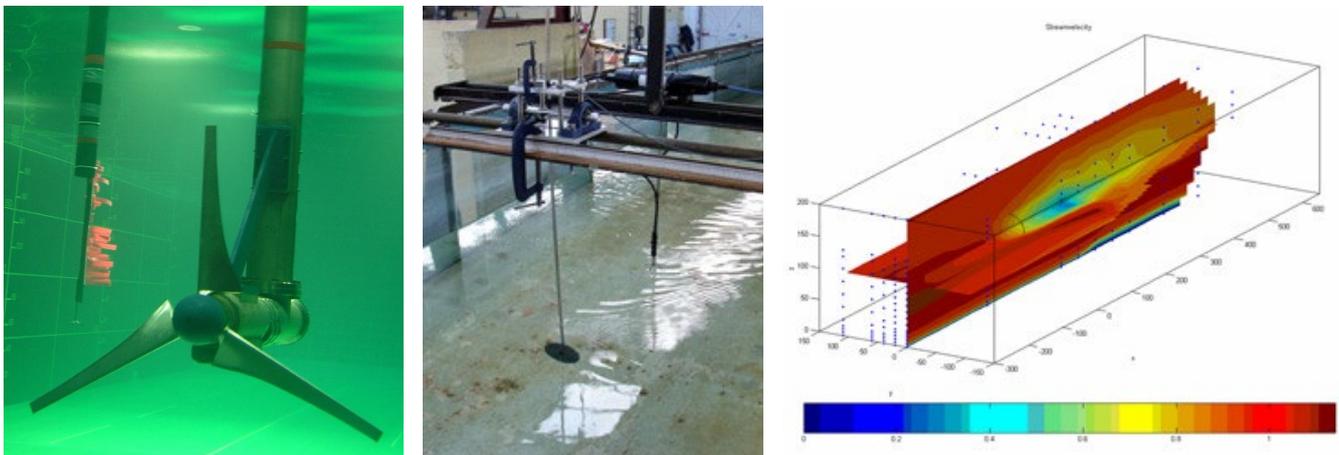


Figure 1: Left to right: 0.8 m diameter turbine on test; rotor disk simulator in flume; 3D flow visualization based on ADV flow profiles

Who should attend?

- PhD students.
- Early career researchers.
- Industry practitioners.

who are planning to carry out experimental laboratory-scale testing of devices or subsystems relating to marine current energy devices.

Key facts

- Attendance at the Summer School is **free** but places are limited and allocated competitively (see below)
- The Summer School will be residential and delivered **in-person** based at [Boldrewood Innovation Campus](#) at the University of Southampton
- More details of accommodation and social programme will be delivered once demand for places is gauged
- The Summer School is led by Prof AbuBakr Bahaj (University of Southampton) and Prof Tim O'Doherty (Cardiff University)

How to apply for a place at the Summer School

If **you** would like to apply for a place on the PRIMaRE Summer School 2021, please fill in the application form at <https://energy.soton.ac.uk/primare-summer-school-2021/> by **Friday 13 August at 12:00 BST**. Applications will be anonymized (name and contact details removed) and the responses assessed **blind** by a panel drawn from the PRIMaRE Committee. The responses will be ranked based on the technical understanding demonstrated and the likely impact of the Summer School activities on the applicants' future work. Applicants will be notified by e-mail of success or otherwise by **Friday 20 August**. Note that the organizers may cancel the event at short notice if required to do so by changes in COVID guidance from the University of Southampton.