Candidate Information

Position:	Research Fellow
School/Department:	School of Natural and Built Environment
Reference:	24/111630
Closing Date:	Monday 4 March 2024
Salary:	£37,841 - £40,134 per annum
Anticipated Interview Date:	Thursday 14 March 2024
Duration:	Fixed term contract until 31/03/2025

JOB PURPOSE:

Marine Research Group (MRG) team member and principal researcher for sea trials of marine renewable technologies for industry-academia collaborative research. Both tidal and wave energy converters are being investigated at the late TRL stages. The sea trials will provide critical performance assessment and insight for advancing the technologies to commercialisation. The role will require coordinating marine operators, safety assessment of research procedures and working as part of the team to deliver on-water research.

MAJOR DUTIES:

1. Lead research activities for the successful sea testing of pre-commercial marine energy converter.
2. Understand the performance assessment criteria of marine renewable technologies and adapt methodologies for nonstandard testing.
3. Support the experimental design and develop the instrumentation architecture suitable for sea trial testing to validate the methodology.
4. Specify and procure relevant instrumentation and services within budget and timelines of the project.
5. Document working procedures, method statements and risk assessments in association with the proposed work.
6. Manage data collection and storage.
7. Analyse and critically evaluate the data using methods and techniques appropriate to the research area.
8. Provide quarterly progress reports to the research consortium.
9. Engage in dissemination activities through the research consortium, MRG seminars and social media/ other relevant outlets.
10. Prepare, in consultation with supervisor, material for publication in national and international journals and conferences.
11. Carry out occasional undergraduate/ postgraduate project supervision, demonstrating or lecturing duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
12. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.
13. Provide assistance and feedback to PhD students and other Post Docs with regards to presentations, journal publications and general research work.
14. Contribute to the effective running of the marine research group and Queen's marine laboratory in collaboration with the group.

ESSENTIAL CRITERIA:

1. Normally have or be about to obtain a PhD in Engineering, Physics or Physical Science.
   (NB 'About to obtain' is normally defined as within 3 months of application date).
2. Specific, relevant research experience to include:
   - Marine renewables, desalination, sea trials or other similar fields.
   - Demonstrable experience of electro/hydro-mechanical experiments with data acquisition systems.
   - Demonstrable experience of analysis and evaluation of experimental data from lab or field testing.
   - Track record of publication appropriate to career stage.
3. Ability to contribute to broader management and administrative processes.
4. Contribute to the School's outreach programme by links with industry, community groups etc.
5. Ability to assess and organise resources.

6. Proven ability to communicate complex information clearly.
7. Proven ability to build contacts and participate in internal and external networks.
8. Demonstrate intellectual ability.

DESIRABLE CRITERIA:

1. Knowledge of marine hydrodynamics and associated software.
2. Knowledge of National Instruments or similar hardware and Labview software.