EMEC
THE EUROPEAN MARINE ENERGY CENTRE LTD

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JOB DESCRIPTION AND PERSON SPECIFICATION

KTP Associate – Environmental Monitoring

Salary: £36,477 to £40,691 **Type: 3-year contract**

Location: Orkney, hybrid working arrangements may be considered

Hours: Full time, 37.5 hours per week

Reports to: Susan Learmouth (EMEC) and Dr Benjamin Williamson (UHI)

Advert: This is an exciting opportunity for an ambitious qualified candidate in Data Science, Environmental Science, Engineering or a relevant field covering sensing and instrumentation, to fast-track their career development as a Knowledge Transfer Partnership (KTP) Associate. The candidate will lead development of environmental monitoring technologies, data management and analysis methods to investigate animal interactions with marine energy devices. This work will involve independent design, research into sensing and instrumentation, test and validation, system integration, data processing and algorithm development.

This crucial work will allow UK and global regulatory authorities to de-risk or retire existing marine renewable energy environmental concerns, and facilitate streamlined consent procedures to enable a sustainable, effective energy transition.

Co-funded by Innovate UK, KTP supports partnerships between business and universities, placing KTP Associates to work on innovative high-profile projects. The successful candidate will undertake a 36-month collaborative project between the world's leading demonstration facility for wave and tidal energy technologies, the European Marine Energy Centre (EMEC), and the Environmental Research Institute at the University of the Highlands and Islands (ERI-UHI). The post will be based at the EMEC in Orkney, Scotland.

The successful candidate will receive extensive practical and formal training, gain marketable skills, broaden their knowledge and expertise within an industrially relevant project, and gain valuable research and commercial experience from business and academic mentors. There is significant opportunity for autonomy, as the candidate will be responsible and accountable for the project, with direct access to managers, and responsible for coordinating work between the University and EMEC. They will build skills in innovation as a springboard for a future career in either academia or industry.

The KTP Associate will also benefit from a Personal Development Budget of £6,000, significant opportunities for training and learning new skills with at least 10% of time allocated to personal development. 2-weeks of residential dedicated training in commercial awareness, leadership and management are provided with the cohort of other KTP Associates.

Purpose: The post-holder will lead development of environmental monitoring technologies to investigate animal interactions with marine energy devices, working with EMEC and UHI.

Responsibilities:

1. Lead design, development, test and deployment of sensors and instrumentation to monitor animal interactions with tidal stream turbines.
2. Process, analyse and interpret active acoustic data (e.g., multibeam imaging sonar, multi-frequency echosounder) from a variety of seabed and mobile platforms.
3. Take a leading role in evaluating technical challenges from existing methodologies and the creation of a validated system for active acoustic monitoring.
4. Report and scientific research writing for peer-reviewed publication.
5. Maintain an up-to-date project plan and provide progress reports for presentation at regular Local Management Committee (LMC) meetings.
6. Support the implementation of a new environmental monitoring consultancy service.
7. Facilitate knowledge transfer between UHI and EMEC.
8. Deliver presentations to project team members and technical experts.
9. Provide guidance and training as required to staff at EMEC.
10. Carry out administrative tasks related directly to the delivery of the project and knowledge transfer, and provide project and budget management.
11. Develop technical and personal skills (verbal and written) as required with increasing responsibility as experience level develops through the duration of the project.
12. Ensure that the EMEC Integrated Management System is adhered to and assist the Quality Manager and others with identifying and progressing improvement actions, supporting EMEC's accreditation by the UK Accreditation Service (UKAS) or other relevant body.
13. From time to time carry out other assignments which may differ from the above as instructed by the line management.

Reports: There are no reports to this position.

Person Specification

Education:

Essential – MSc in Electronic & Electrical Engineering, Computer/Data Science, Mechatronics, Environmental Science or a relevant field with a quantitative and analytical background e.g. Oceanography, or Marine Science.

Desirable – A PhD in a relevant field and awareness of research.

Skills and Knowledge:

Essential – Excellent verbal and written communication skills. Programming (e.g., MATLAB, Python) and data analysis.

Desirable – Time and budget management.

Personal Attributes:

Essential – Self-motivated, with strong attention to detail, a logical and systematic approach to tackling and managing large complex projects and analytical abilities. Dynamic interpersonal skills and the ability to effectively communicate with diverse audiences e.g. academic and technical teams, sales and marketing personnel, existing company customers and potential new clients. Willingness to undertake field trials offshore.

Desirable – Interest in marine science or environmental applications.

Experience:

Essential – Experience of working independently and in a team. Experience of working to tight deadlines and ability to prioritise workloads.

Desirable – Experience in sensor system design, sensor integration, prototyping and testing. Experience of underwater acoustics (echosounders, imaging sonar) or related data processing. Commercial awareness or experience working in or with industry.

Special Conditions Associated with the Role

1. Some flexibility in hours is likely to be required.
2. Must be able to travel for surveys, meetings, conferences, etc (as necessary).
3. Will involve some working at sea.
4. Will require some travel to Thurso, Scotland, to work with the academic partner UHI.
5. The post is based in Orkney but hybrid working may be considered.

How to Apply

- Application deadline: 23 June 2025
- Interviews w/c 7 July 2025. Possibility for initial interviews online.
- For an informal discussion about this post, please contact benjamin.williamson@uhi.ac.uk or donald.leaver@emec.org.uk

Completing the Application Form

Please read the application form thoroughly and that you complete all sections. Where answers require additional detail, this should be provided on a continuation sheet and attached to the form. A current CV and covering letter should also be provided in addition to the application form.

The information that you provide in your application form & other supporting information is the only information we will use in deciding whether or not you will be short listed for interview. Your application will be treated in the strictest confidence. Completed applications must be returned by the closing date indicated. Applications should be sent to recruitment.nwh@uhi.ac.uk

References

Please give the name, address, telephone number and email address (if known) of two referees, including your existing or last employer, to whom reference may be made in support of your application concerning your professional ability and performance at work. References will only be taken up for short-listed candidates. Please note that any offer of employment will be conditional upon receipt of satisfactory references from your current/last employer or academic institution, unless advised otherwise.

Work for us

The Associate will be employed by UHI North, West and Hebrides, but based at the company partner, EMEC. Find out more about the EMEC team environment and hear what our team has to say, here: Work for us

Moving to Orkney

You may be interested in looking at www.orkney.com which provides information about Orkney and its economy, housing, leisure, education, health and environment.