

Marine Institute Job Description

Position	Post-Doctoral Research Scientist – COMPASS Interreg Project
Contract	3.5 year Specified Purpose contract
Service Group	Marine Environment & Food Safety Services (MEFSS)
Location	Oranmore, Co. Galway, Ireland

Brief description of the Marine Institute:

The Marine Institute is a non-commercial semi-state body, which was formally established by statute (Marine Institute Act, 1991) in October 1992.

Under the Act, the Marine Institute was given the responsibility:

“to undertake, to co-ordinate, to promote and to assist in marine research and development and to provide such services related to marine research and development, that in the opinion of the Institute will promote economic development and create employment and protect the marine environment ”.

The Marine Institute is the national agency responsible for marine research, technology, development and innovation (RTDI). The Marine Institute seeks to assess and realise the economic potential of Ireland's 220 million acre marine resource; promote the sustainable development of marine industry through strategic funding programmes and scientific services; and safeguard the marine environment through research and environmental monitoring. The Institute works in conjunction with the Department of Agriculture, Food and Marine (DAFM) and a network of other Government Departments, semi-state agencies, national and international marine partners.

The vision of the Marine Institute is

“ a thriving maritime economy in harmony with the ecosystem and supported by the delivery of excellence in our services “

In order to achieve this vision, the MI have six service areas; (1) Ocean Science and Information Services, (2) Marine Environment & Food Safety Services, (3) Fisheries Ecosystems Advisory Services, (4) Irish Maritime Development Office, (5) Policy, Innovation and Research Support Services and (6) Corporate Services.

The Marine Institute 3 Year Strategic Plan (2015 to 2018) is available on; http://www.marine.ie/Home/sites/default/files/MIFiles/Docs_Comms/MI%20Strategic%20Business%20Plan%20-%202015%20-%202018.pdf

Harnessing our Ocean Wealth (HOOW) is an Integrated Maritime Plan (IMP) for Ireland. HOOW sets out a roadmap for the Irish Government's vision, high level goals and integrated actions across policy, governance and business to enable our marine potential to be realised. Goal 2 of HOOW focuses on healthy marine ecosystems and specifically; to protect and conserve our rich marine biodiversity and ecosystems; manage our living and non-living resources in harmony with the ecosystem; implement and comply with environmental legislation (see <http://www.ouroceanwealth.ie/>)

Description of Service Group:

Marine Environment & Food Safety Services (MEFSS), a service area of the Marine Institute, provides essential scientific advice and a range of food safety and marine environmental monitoring services to help ensure Irish seafood products meet approved standards and that the marine environment is managed in a sustainable manner.

These services are carried out by teams of scientific personnel engaged in a range of monitoring and research programmes including aquaculture, finfish and shellfish health, shellfish safety (biotoxins and microbiological), and marine chemistry.

Background to Requirement:

Climate change, including ocean acidification (OA) resulting from increased uptake by the oceans of carbon dioxide from the atmosphere, is considered by many to be the greatest present-day threat to the marine environment. The recent Intergovernmental Panel on Climate Change report included a conclusion that ecosystems, including cold-water coral communities, are at risk of adverse impact from ocean acidification, especially in combination with rising temperature extremes, in the next decades. Managing pressures on Marine Protected Areas (MPA) may help strengthen resilience of these species and habitats to climate change and OA, but it is essential to understand the vulnerability of these species to the longer term pressures.

THE COMPASS Project, led by the Agri-Food and Biosciences Institute (AFBI) in Northern Ireland, will deliver the first fully coherent network of monitoring buoys across the regional seas of the Republic of Ireland, Northern Ireland and West Scotland. Integrating existing oceanographic monitoring stations within a network of new buoys equipped with oceanographic sensors, acoustic recorders and advanced fish tracking technology, this project will build the capacity for effective monitoring and management of Marine Protected Areas (MPAs). Work Package (WP) 3 focuses on an enhanced oceanographic monitoring network with underway observations, telemetry and integrated glider missions to deliver a continuous oceanographic and carbonate chemistry data set to describe spatial and temporal variability; an assessment and evaluation of ocean acidification sensor systems; and an assessment of the vulnerability of MPA features to ocean acidification.

Summary of the Role:

The Marine Institute, as partner in the COMPASS Partnership, has been awarded funding under the Interreg VA area project to develop cross-border capacity for the monitoring and management of Marine Protected Areas (MPA) & species. The Marine Institute wishes to recruit a research scientist at Post-Doctoral level for a period of up to three and a half years, who will have a central role in implementing the research project along with the project team. The role will involve:

- Procuring, operating and deploying oceanographic sensors and other equipment;
- Developing and carrying out a water sampling programme;
- Chemical analysis to complement and verify sensor results;
- Undertaking Ocean Acidification vulnerability study for project MPAs;
- Data management, quality assurance and assessment;
- Preparing reports, publications, and other relevant project outputs; and
- Day to day coordination of the project to ensure the deliverables and milestones are achieved.

The research will be primarily based in the Marine Institute facility at Rinville, Oranmore, Co. Galway with regular sampling from inshore vessels.

Principal Tasks:

Working closely with the project team members in MI, AFBI, SAMS and MSS:

- Participate in the procurement process for equipment, including oceanographic sensors, laboratory consumables etc.
- Carry out a literature review to assess the state of current knowledge in the project field.
- Carry out field sampling, according to best practice, to address the core project objectives and deliverables.
- Organise, outsource or undertake high quality laboratory analysis, including carbon chemistry and nutrient analysis.
- Develop, co-ordinate and participate in collaborative testing and intercomparisons across project partners.
- Participate in and/or support MI ship-based research surveys, as relevant.
- Carry out a vulnerability study on impacts of Ocean Acidification on MPAs in the project area.
- Management and quality assurance of data generated under WP3.
- Data analysis to deliver appropriate outputs.
- Collaborate closely with WP3 partners and other WP partners to ensure project objectives are met.
- Support for day to day management and administration of the project, including relevant budgets.
- Attend relevant project and other meetings.
- Engage fully with the protocols in place in MI and specifically carry out all work in accordance with provisions of the MI quality system (ISO 17025), where relevant.
- Prepare technical reports and scientific publications.
- Any other duties as may be relevant to this position and as required from time to time.
- Ensure all activities are undertaken in accordance to the Health and Safety Statement and associated Policies and Practices.

Reporting Structure:

The successful candidate will be based at the Marine Institute HQ in Oranmore, Galway and will directly report to the Marine Chemistry Team Lead.

Contacts:

The candidate will have close interactions with the MI based Project Team and Work Package Leader in Agri-Food and Biosciences Institute (AFBI), Northern Ireland and other partners at Scottish Association for Marine Science and Marine Science, Scotland. The candidate will be based within the MI Marine Chemistry Section and will interact with other staff members in the Marine Environment and Food Safety Services group and the Ocean Science and Information Services group.

The candidate will also interact with the project team on the related Marine Institute funded NUI Galway project “Ocean acidification and biogeochemistry: variability, trends and vulnerability” to ensure synergies between these projects are maximised.

Education, Professional or Technical Qualifications, Knowledge, Skills, Aptitudes, Experience, and Training

Essential:

- A BSc. (Hons) and PhD in chemistry, marine or environmental science, oceanography, environmental engineering or similar related discipline.
- Willingness and ability to work at sea, including in small craft.

- Previous relevant experience in chemical oceanography
- Experience in environmental chemical analysis.
- Effective numerical and literacy skills.
- The ability to be well organised and work to deadlines identifying priorities and managing time effectively.
- A high level of computer literacy (Word, Excel, PowerPoint, Internet/Email).
- Strong interpersonal skills; the ability to communicate effectively both in writing and verbally, at all levels.
- The ability to work unsupervised and to work well with others.
- Full clean driving licence.

Desirable:

- Experience in delivering related environmental research projects especially with a focus on marine chemistry.
- Track record in working from sea-going vessels and experience in chemical sampling in the marine environment.
- Good understanding of ocean acidification and marine carbonate chemistry.
- Experience in environmental chemical analysis for key seawater parameters such as nutrients and carbon chemistry.
- Familiarity with marine scientific instrumentation including deployment, operation, data download and basic maintenance.
- Experience in the use of specialist software for data analysis, such as GIS, MATLAB, R, ODV.
- Track record in preparing and publishing scientific and technical reports and peer reviewed publications.
- Experience in analytical trouble shooting/problem solving.

Special personal attributes required for the position:

- Self-starter, dynamic and reliable.
- An ability to work in an organised manner and progress work independently.
- An analytical approach to problem solving.
- Self-sufficiency, while being a good team player.
- Good interpersonal skills.
- Ability to effectively communicate results of teamwork in written and audio-visual formats.

Salary:

Remuneration is in accordance with the Public Sector, Department of Finance approved Salary Scale for Post-Doctoral Researcher, with a starting salary of €36,489 per annum pro-rated with time worked. You will become a member of the Single Public Service Pension Scheme.

Annual Leave:

The annual leave entitlement for a Post-Doctoral Research Scientist is 24 working days per annum pro-rated to reflect time worked. Annual leave entitlements are exclusive of Public Holidays. All leave must be approved by your manager or their authorised representative; in advance of being taken and in line with Marine Institute leave policies.

Duration of Contract:

This temporary specified purpose contract of employment is funded under Interreg VA programme and will run for a duration of up to three and a half years. The successful candidate will be on probation for the first six months of this contract.

How to Apply:

A C.V. and letter of application, summarising experience and skill set applicable to the position should be emailed to recruitment@marine.ie or posted to Human Resources at the Marine Institute, Rinville, Oranmore, Galway. All correspondence for this post should quote reference **MEFSS/Post-Doc_COMPASS/Oct 2017**

Closing date for applications

All applications for this post should be received by the Marine Institute in advance of **5pm on Monday 30th October 2017**. Please note that late applications will not be accepted.