

Marine Institute Job Description

Position	Scientific & Technical Officer (STO) EU Project Data Delivery
Grade & Contract	Temporary Specified Purpose Contract for up to three years (AMRIT, ANERIS, DIGI4ECO & TRIDENT EU project funded)
Service Group	Ocean Climate and Information Services (OCIS)
Location	Marine Institute, Oranmore, Co. Galway, Ireland (The Marine Institute has a Blended Working Policy in Place)

Who will you Work With and What Will The Role Involve?

The successful candidate will work within the Marine Research Infrastructures section as a Scientific and Technical Officer responsible for developing data and information content and services for EU projects and programmes including the Horizon Europe project AMRIT, ANERIS, DIGI4ECO & TRIDENT as well as other EU and national projects supporting marine observing infrastructures initiatives.

This will require the candidate to attend and assist with project meetings and help to ensure that MI project deliverables are met within the designated timeframe and budget. Among other responsibilities, the post holder is expected to provide data assistance to project partners, provide high-quality reporting as needed, and provide input for proposals as requested.

The STO will be work on developing requirements and data and information inputs from a range of sources for the DIGI4ECO and AMRIT projects specifically, as well as ANERIS and TRIDENT, other EU and national projects. The successful candidate will report to the section's EU Projects Team Leader. The STO may, at specific times, be needed to assist the broader MRI team in data analysis and reporting for new and existing technical services at times.

The STO will work across a range of scientific disciplines and with a wide range of participants in the academic, research, public and private sector organisations to implement robust data services with high quality content which can be utilised by all project partners in delivering on the EU funded projects

AMRIT

AMRIT aims to create a cohesive and integrated approach to marine research infrastructures, ensuring that metadata & data is effectively managed and utilised across various platforms. By fostering collaboration and innovation, AMRIT is set to transform the landscape of marine research, making it more efficient and impactful. The Marine Research Infrastructure is leading the communication work packages for AMRIT. (www.amritproject.eu)

ANERIS

ANERIS intends to implement Operational Marine Biology (OMB), a biodiversity information system for long-term routine of ocean and coastal life measurements, as well as create new scientific instrumentation tools that incorporate genomics, imaging-biooptics, and participatory sciences. (www.aneris.eu)

DIGI4ECO

DIGI4ECO project aims to create a 4D ecological monitoring system, Digital Twin of the Ocean (DTO), to aid restoration efforts. The system will use in-situ data from demo missions and local data from societal actors and marine institutions to calculate ecological indicators. The project will utilise autonomous stationary platforms, mobile instruments (e.g., AUVs), and innovative sensors to offer a comprehensive 4D view of the monitored areas and their surroundings. The data will be processed using AI algorithms for real-time species identification and classification. (www.digi4eco.eu)

TRIDENT

TRIDENT plans to create a cost-effective, transparent system for continuous environmental impact assessment and monitoring of deep sea exploration and exploitation activities. The system will operate autonomously in extreme conditions, providing real-time data to authorities, and will address gaps in real-time data gathering methods. (www.deepseatrident.eu)

What Will You Be Doing Every Day?

Principal Tasks:

The principal tasks will be to ensure delivery of high quality, timely and accurate data deliverables for the EU funded projects, associated EU Research Infrastructure programmes, and provide support to project management facilitation, specifically:

- Deliver data services to support AMRIT and DIGI4ECO projects' needs, including the definition and communication of data-related requirements with project partners.
- Collation and acquisition of data relevant to the EU projects. This will involve connecting with other Marine Institute groups including Research Vessel Operations, Fisheries and Ecosystem Advisory Services amongst others.
- Ensure the application of the Institute's internationally accredited Data Management Quality Management Framework to related data processes supporting the EU projects.
- Work with the wider Information Services & Development (IS&D) and Marine Research Infrastructures (MRI) teams to define technical service delivery approach and needs.
- Abide by the guidance and standards for data collection and sharing of data that can be used for new data acquisition across the EU projects.
- Participate in EU project activities supporting the collation, collection and analysis of related data.
- Ensure quality assessment and accuracy of data collated
- Attend project meetings on behalf of the Marine Institute
- Work with EU Project Administrator to ensure financial, reporting and administrative deadlines are met.
- Any other duties relevant to the role and grade, as required from time to time.

What do You Need to Have Done to Apply for This role?

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

Essential / Important:

- A degree in computer science, data engineering, or other numerical disciplines. Physical oceanography degrees will also be taken into consideration. Experience of using enterprise database management solutions such as SQL Server or alternative including use of SQL query language.

- Experience of developing reporting, analytical and / or data visualisation capabilities using a structured process.
- Demonstrable experience in the following:
 - Business analysis and requirements gathering
 - Technical specification
 - Delivery of project outputs
 - Customer support and problem management
 - Experience in working as part of a team
- Strong communication skills, including technical documentation and oral presentations.
- Proven collaboration skills including team working and wider project outreach and networking.
- The ability to work unsupervised with demonstrated ability to use initiative.

Ideally Nice to Have / Desirable:

- Exposure to data from scientific or environmental data would be beneficial.
- An understanding of data tools and scripting languages e.g. Javascript, Python, Jupyter notebooks.
- Experience of working with dynamic data e.g. from sensors or models.
- Experience of using project management for development of data or digital services.
- Understanding of related technical trends e.g. cloud platforms, APIs incl. REST and OGC, IoT, AI tools, etc.
- Experience of development processes with version control and release management would be very beneficial e.g. AGILE with DevOps/GitHub.
- Knowledge of relevant data standards, e.g. ISO19139 metadata, INSPIRE, etc.
- Some familiarity with the marine sector.
- A post graduate qualification in computer science or related, data analytics, GIS, earth science, or oceanography or data analytics work experience would be beneficial.

What else do you need to know?

(Special personal attributes required for the role)

This is an exciting opportunity to work on progressing developments in support of ground breaking European wide advanced marine technology projects. This position will start in March 2025, and would suit an adaptable, enthusiastic, and diligent person. You should be:

- Dynamic and reliable.
- Able to work in an organised manner and progress work independently.
- Self-sufficient while being a good team player.
- Able to effectively communicate results in written and audio-visual formats.
- Adept at collaborating with scientists, engineers, and members of a technical team.
- Willing to travel internationally to attend project meetings and workshops.

Description of Service Group: Ocean Climate and Information Services (OCIS)

The mission of OCIS is *“To provide scientific, operational and analytical support and services to strategic RTDI and statutory monitoring programmes (at national and international level) to promote and support the sustainable development of Ireland’s marine resources”*

Ocean Climate and Information Services incorporates:

- Information Services & Development
- Advanced Mapping Services
- Research Vessel Operations
- Oceanographic and Climate Services
- Marine Research Infrastructures

Marine Research Infrastructures (OCIS)

The Marine Research Infrastructures section within OCIS manages and operates a diverse range of test, demonstration and monitoring platforms for ocean observations and advanced marine technology in a national and international context, providing vital data enabling the research and monitoring of Ireland's seas. Full details can be found [here](#)

The team are involved as work package and task leader in a number of EU funded projects. These projects aim to strengthen coordination and collaboration between European Research Infrastructures (RIs). The projects involve a range of activity and topics on developing advanced marine technologies, integration among RIs, sustainability, data harmonisation and standardisation, access to infrastructure and data.

Who Will You Report to / Who will Manage and Support You?:

The successful candidate will be based at Marine Institute Oranmore and will report to the EU Projects Team Leader within the Marine Research Infrastructures section of OCIS.

What we offer

We value our staff, and we value their contribution to the work of the Marine Institute. In return for this, we provide benefits that promote a healthy work-life balance and which we hope will help them to develop professionally. These include personal and career development, work/life balance policies, an employee assistance programme, "Bike to Work" Scheme, staff medicals and annual flu vaccination.

Contacts:

Within the Marine Institute

Ocean Science and Information Services & Corporate Services groups of the Marine Institute

Outside the Marine Institute

Research centres and universities, both national and international partnering in the EU projects, P&O Maritime Logistics, and other external contractors.

Training

A full range of training will be provided as required, on the job and through appropriate courses. Training needs will be identified through the MI Performance Management Development System (PMDS).

Salary:

Remuneration is in accordance with the Public Sector, Department of Finance approved Salary Scale for Scientific & Technical Officer, with a full time salary scale running from €40,803-€75,000 per annum, pro-rated with time worked. You will become a member of the Single Public Service Pension Scheme unless you are currently or have work

Annual Leave:

Annual leave entitlement for a Scientific & Technical Officer is 25 working days per annum pro-rated to reflect time worked. Annual leave entitlements are exclusive of Public Holidays. All leave must be approved in advance in line with Marine Institute leave policies and using time and leave management system in place, by your manager or their authorised representative.

Duration of Contract:

This temporary fixed term contract of employment will be for a 3-year period up to the end of February 2028. The successful candidate will be on probation for the first six months of this contract.

Who is 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 Ireland’s scientific agency responsible for supporting the sustainable development of the state’s maritime area and resources. We do this through conducting applied research and providing scientific knowledge, advice and services to government, industry and other stakeholders and users. This policy advice capacity, our broad mandate, and the research programmes we fund and undertake, give us a unique insight into the science-policy interface and make us an exemplar in the provision of integrated ocean knowledge.

The Marine Institute provides a broad range of essential scientific support to its parent department, the Department of Agriculture, Food and the Marine (DAFM). There is an increasing demand from Government for the data and evidence that are essential to inform national policy and to underpin the state’s governance of our maritime area. Through laboratory, field and seagoing work, the Institute carries out statutory environmental, fisheries and aquaculture surveys, seafood testing and other monitoring programmes assigned by government. The Institute plays an important role in supporting the state’s response to the impacts of our changing seas and oceans, through working with the national and international scientific community to observe, study and understand our changing oceans. This essential scientific advice supports industry, protects consumers and underpins legislative and other obligations aimed at the protection and management of the marine environment.

Our vision - *The Marine Institute is a national and international leader in ocean knowledge that benefits people, policy and planet.*

Our Mission - *The Marine Institute provides scientific, research and development services to government, agencies, industry and society that support the sustainable use of our maritime area, the protection and restoration of marine ecosystems, and promote a shared understanding of the ocean.*

There are 6 broad service areas within the Marine Institute; (1) Ocean, Climate and Information Services, (2) Marine Environment & Fish Health Services, (3) Fisheries Ecosystems Advisory Services, (4) Irish Maritime Development Office, (5) Policy, Information and Research Services and (6) Corporate Services.

The Marine Institute 5 Year Strategic Plan (2023 to 2027) is available [Here](#)

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, H91 R673. All correspondence for this post should quote reference **OCIS/STO-DATA-DEL/MAR25**.

Closing date for Applications:

All applications for this post should be received by the Marine Institute in advance of **12pm noon, 20th of March 2025**. Unfortunately, late applications cannot be accepted.

Use of Data - all personal data and the information submitted for this application will be used solely for the purpose of this campaign, after which it will be deleted in line with our General Data Protection Regulation (GDPR) Policy and data retention schedule. All information will be treated with the strictest confidence and accessed only by those involved directly in the campaign.

The Marine Institute is an organisation that champions Diversity, Inclusion & Equality for all. We encourage and welcome applications from anyone interested in this role.

Please do advise if there are any special accommodations required for the recruitment process. We are here to help you access opportunities with us.