**Marine Institute Job Description**

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**Brief description of the Marine Institute:**

The Marine Institute (MI) 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.

**Our vision - The Marine Institute, as a global leader in ocean knowledge, empowering Ireland and its people to safeguard and harness ocean wealth.**

**Our Mission - The Marine Institute, provides government, public agencies and the maritime industry with a range of scientific, advisory and economic development services that inform policy-making, regulation and the sustainable management and growth of Ireland’s marine resources. The Institute undertakes, coordinate and promotes marine research and development, which is essential to achieving a sustainable ocean economy, protecting ecosystems and inspiring a shared understanding of the ocean.**

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 Services and (6) Corporate Services.

The Marine Institute 5 Year Strategic Plan (2018 to 2022) is available [here](#).

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:

**Fisheries Advisory Ecosystems Services (FEAS)**

The mission of FEAS is “to assess, research and advise on the sustainable exploitation of marine fisheries resources”. Currently, FEAS consists of over 70 scientists, technical, post graduate and administrative staff under the directorship of Dr. Paul Connolly. The Service group operates a significant part of their services from the headquarters in Oranmore. Co Galway with additional port based facilities and a major research facility at Newport, Co Mayo. FEAS staff spend a considerable amount of time at sea on commercial fishing vessels and on research vessel surveys carried out on the RV Celtic Explorer and RV Celtic Voyager. A key output of FEAS is the annual Stock Book and the annual Shellfish Fisheries Review. These provide the latest assessments and scientific advice for the resources exploited by Irish vessels and is a key reference for the Governments sustainability assessment presented annually to the Oireachtas. A key element of FEAS work is the provision of scientific support for the Irish government (principally the Department of Agriculture, Food and the Marine – DAFM) on marine fisheries ecosystems related issues. FEAS also publish much of its work in peer reviewed scientific journals.

The 9 goals of FEAS are:

1) To maximise the benefits of the EU data collection programme (DCMap)
2) To build a strong working relationship with the fishing industry and the environmental NGO’s;
3) To build an effective working relationship with key Government Departments (principally DAFM) and other partner agencies.
4) To use ICES, NASCO, ICCAT, OSPAR and the EU system to support the delivery of excellence in our fisheries and ecosystems science and advisory services;
5) To engage in a suite of research activity that supports the evolution of scientific advice and that is in line with MI/FEAS mission, HOOW, FH2020, Horizon 2020, the new RTDI strategy and the objectives of the CFP;
6) To progress and incorporate the ecosystem approach to Fisheries Management (EAFM) into all aspects of our work;
7) To increase public awareness of the importance of the Ocean;
8) To Ensure a common understanding of the “value chain” within the FEAS team and the MI;
9) To ensure FEAS is a rewarding place to work;

**The Work of FEAS**

FEAS work programmes are focused on:

1) Data Collection and Data Management
2) Fisheries Resources Assessment and Advice
3) Modelling, Simulations and Management Plans
4) Fisheries - Ecosystems Interactions

FEAS (STO) Shellfish Fisheries Assessment/May 2019
(5) Stakeholder Engagement

FEAS staff actively participate at many meetings of the International Council for the Exploration of the Seas (ICES). ICES organises many Expert Groups, Study Groups and co-ordination Groups related to provision of scientific advice on marine ecosystems. The ICES Strategic Plan (2014 to 2018) is focused on advancing scientific understanding of marine ecosystems, providing information, knowledge and advice on the sustainable management of human activities affecting and affected by marine ecosystems. ICES is a key forum for scientific co-ordination of data collection and the provision of independent scientific advice.

FEAS also participate at other international fora including STECF (Scientific, Technical and Economic Committee for Fisheries), NEAFC (North East Atlantic Fisheries Commission) and NASCO (North Atlantic Salmon Commission). FEAS provide scientific support for the DAFM at various EU meetings (e.g. the EU Norway Agreements and the EU Council of Fisheries Ministers). FEAS produce the annual Stock Book of Demersal and Pelagic Fish and the Shellfish Review which provides the latest scientific advice on those stocks of interest to Ireland. In addition, FEAS is responsible for the salmon National Coded Wire Tagging and Tag Recovery programme and work closely with IFI (Inland Fisheries Ireland) on the Standing Scientific Committees for salmon and eel.

The Inshore fisheries team at FEAS is responsible for assessment and advice on Shellfish stocks (crustaceans and molluscs) and on the interactions between these fisheries and habitats and species designated under the Habitats and Birds Directives. This is achieved through annual research surveys, observer at sea and port sampling programmes and risk assessment procedures. The main clients for this advice are DAFM, the Inshore Management Group (IMG), comprised of DAFM and the Marine Agencies, and the National Inshore Fisheries Forum (NIFF).

http://www.facebook.com/#!/marineinstituteireland?fref=ts

Summary of the Role:

The Scientific Technical Officer will work with the Inshore fisheries team at FEAS. The STO will take a lead role in survey data analysis and stock assessment using existing methods and will participate in the annual shellfish survey programme.

Background to Requirement:

The Marine Institute is responsible for the implementation of the DCMap which is part of Ireland’s Operational Programme (OP) 2014-2020 funded under EMFF. The objective of the DCMap, as set out in the EMFF OP, is to implement a programme of data collection, stock assessment and management advice for commercial and recreational fisheries.

Shellfish fisheries, both inshore and offshore, are an important component of marine commercial fisheries. In Ireland the inshore fleet (<12m in length) have a high reliance on stocks of crustaceans and bivalves within 12nm of the coast.
The assessment of the status of shellfish stocks and provision of management advice for these stocks is critical to future sustainability of these fisheries.

The STO will contribute to the assessment programme for shellfish within the Inshore Fisheries Team. The position requires a background in analysis and estimation of spatial data, stock assessment using ‘data limited’ methods and knowledge of shellfish biology and ecology.

**Principal Tasks:**

The scientific technical officer will be responsible for the following:

- Implementing existing routines for analysis and estimation of shellfish survey data
- Running existing data limited stock assessment models
- Modelling of existing time series data (catch, fishing effort)
- Management and analysis of spatial data (VMS for inshore vessels)
- Participating in annual shellfish surveys at sea
- Maintaining data quality and data management standards
- Attending ICES Working Groups relevant to shellfish assessment
- Attending regional and national inshore fisheries meetings

**Reporting Structure:**

The successful candidate will be based at M.I. Oranmore and will report to the FEAS Team Leader for Inshore Fisheries.

**Contacts:**

**Within the Marine Institute**
FEAS Director, Managers and Team members; Marine Institute colleagues across other service groups.

**Outside the Marine Institute**
Department of Agriculture Food and Marine (DAFM), SFPA, BIM, NIFF and Regional Inshore Fisheries Forums. ICES Working Groups and Workshops.

**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).

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

**Essential:**

- A relevant third level degree in a science/marine science or related field
- High level of proficiency with the R statistical programming language
- Spatial data analysis skills in GIS, R or other relevant platforms.
- Experience with SQL; query design
- Strong data handling skills.
- Proven scientific report writing skills.
- Higher level of experience in the use of Microsoft Word, Excel, PowerPoint and databases.
- Excellent interpersonal skills and an ability to work with and effectively communicate with
Industry stakeholders as well as with technical and scientific and non-technical groups at all levels, both in writing and verbally.
- Experience at collaborating with others through scientific expert groups or research.
- Effective organisation and administration skills.
- Good time management and the ability to prioritise and meet deadlines.
- The ability to work unsupervised and as part of a team.
- Experience of working safely in a laboratory environment.
- Sea going experience and sufficiently fit to pass an ENG II Medical and participate in appropriate mandatory safety related training.
- A full clean Driving License.

**Desirable:**

- Demonstrated experience and knowledge of fisheries science
- Demonstrated experience in statistical modelling including GAM and GLM
- Knowledge of Geostatistics
- Knowledge of Bayesian methods
- Knowledge of data limited methods for fisheries stock assessment
- SQL database design

**Special personal attributes required for the position:**

- Dynamic and reliable.
- Self-sufficiency, while being a good team player.
- Good interpersonal skills.
- Ability to work diplomatically in resolving issues with stakeholders.
- Highly organised and the ability to work under pressure in a dynamic environment.
- Excellent interpersonal skills and an ability to work with and effectively communicate with the marine stakeholders.
- Effective organisation and administration skills.
- Good written and verbal communication skills in addition to effective numeracy skills.

**Salary:**

Remuneration is in accordance with the Public Sector, Department of Finance approved Salary Scale for the Scientific & Technical Officer (Engineer III grade) with a salary of €30,987 - €64,981 per annum pro-rated with time worked. You will become a member of the Single Public Service Pension Scheme.

**Annual Leave:**

Annual leave entitlement for a Scientific & Technical Officer is 25 working days per annum 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, by your manager or their authorised representative.

**Duration of Contract:**

This temporary specified purpose contract of employment will be for the period up to the end of 31st December 2020. 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 STO/SFA/May 2019.
Closing date for Applications:

All applications for this post should be received by the Marine Institute in advance of **12 noon, 20th June 2019**. Please note that late applications will not 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 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 equal opportunities employer