

Careers in Marine Mammal Science and Industry: Building Skills for the Blue Economy



IMarEST Marine Mammal Special Interest Group (MMSIG)

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Endorsed by



2021 United Nations Decade
2030 of Ocean Science
for Sustainable Development

Agenda

- Introduction
- Introduction to the IMarEST
- Special Interest Groups (SIGs)
- Marine Mammal SIG
- Marine Mammal Career Matrix
- Professional Accreditations
- Early Career Associates



Introduction

- Senior Offshore Ecology Coordinator & Marine Mammal Specialist – ESB
- Co-Chair Marine Mammal SIG (IMarEST)
- UN Ocean Decade Ambassador -IMarEST
- Chartered Scientist – Science Council
- Chartered Marine Scientist - IMarEST
- Co-Founding Director – Whalefish
- Chair MMOA Executive Committee 2016-2021
- Advanced Marine Mammal Medic (BDMLR)
- Large Whale Disentanglement Responder
- 20+ Years field experience with marine mammals & megafauna research, mitigation, rescue, rehab & environmental management.
- 55+ projects working with marine megafauna
- ~3000 at Sea/Field days



Professional Institutes



A professional institution, also known as a professional association, professional body, or professional society, is a organisation that helps promote and develop a career and the people who practice in it.

Professional institutions can:

Set standards

- Develop and maintain industry expectations, including codes of conducts, academic accreditations,, and chartership

Provide resources

- Offer continuing education courses, industry publications, and networking opportunities
- Special Interest Groups
- CPD Tracking

Oversee members

- Monitor the knowledge, skills, conduct, and practice of their members

Operate by peer review

- Assess the competence of other individuals through groups of members with expertise in a particular area

Examples of some professional institutions include:

- The Institute of Marine Engineering, Science and Technolgy
- The Royal Society of Biology
- Chartered Institution of Water and Environmental Management
- British Ecological Society
- Chartered Institute of Ecology and Environmental Management
- Marine Biological Association

**Most offer complimentary student memberships.
Highly Recommend to join!**

Introducing the IMarEST

The Institute of Marine Engineering, Science and Technology (IMarEST) is a registered charity and the international professional body and learned society for all marine professionals in over 120 countries.

The largest marine organisation of its kind and the first Institute to bring together over 12,500 marine engineers, scientists and technologists into one international multi-disciplinary professional body.

We promote the development of marine engineering, science and technology, providing opportunities for the exchange of ideas and practices and uphold the safety, status, standards and knowledge of marine professionals worldwide, and a representation channel to regulatory bodies.

OUR VISION

The IMarEST is the trusted voice across the marine sector and is the global community for all marine professionals distinguished as leaders in shaping a sustainable world.

STRATEGIC THEMES

TECHNICAL
LEADERSHIP



COMMUNITY &
MEMBER ENGAGEMENT



GROWTH THROUGH
INNOVATION & RELEVANCE



MEMBERSHIP &
PROFESSIONALISM



PUBLIC PROFILE &
COMMUNICATIONS



OPERATIONAL
EXCELLENCE



MEMBERSHIP & REGISTRATION

We set the global standards for professional excellence.

Professionals can apply for different membership grades depending on how advanced they are in their careers.

Correspondingly, their skills, experience and competence informs the level of professional registration they can achieve, with Chartered status being the highest.

The IMarEST is one of the very few PEIs that can offer our own professional registrations along with being licensed by the Engineering Council and Science Council.



Special Interest Groups

IMarEST Special Interest Groups (SIGs) are member-led groups that operate to drive progress and learning in specialist and emerging fields in the marine sector. These SIGs are networks of experts engaged in the latest technical thinking.



MMSIG



- Founded in 2020
- 17 Active Committee Members
- >350 Corresponding Members
- Promoting knowledge exchange, fostering collaborative partnerships, capacity building and advocating advancements in marine mammal science, business, conservation, monitoring, and mitigation through:
 - Science communications articles
 - Career matrix
 - Webinars
 - Workshops
 - University guest lectures
 - Mainstream news outlet contributions
 - UN Decade of Ocean Science and sustainability contributions
 - Partnered with Defra mNCEA – Marine Mammal Monitoring Innovation project



Marine Mammals Special Interest Group Careers Matrix



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FIELD	ROLE TYPES	EXAMPLE ACTIVITIES	KEY SKILLS AND EXPERIENCE
Industry (e.g. Oil & Gas, Renewables, Marine & Coastal Construction etc.)	Marine Mammal/Protected Species Observer (MMO/PSO)	<ul style="list-style-type: none"> Visually survey for marine megafauna during industry operations Understand and follow international, national and local regulations, and provide advice to crew to ensure compliance Support onboard operations (and vessel-specific operations) Collate project data to develop and deliver a concise final report Collect and submit photographs of visual sightings Develop and deliver daily and weekly compliance and monitoring reports 	<ul style="list-style-type: none"> Experience of conducting marine mammal surveys including familiarity with species ID and behaviours, and deployment/operation of specialist equipment Adaptability and willingness to work offshore for prolonged periods and in a variety of environmental conditions Experience on vessels at sea Appreciation and understanding of site operations A good attitude to conducting efforts of concentrated effort HMS certification Capacity to make accurate estimates of range at sea Data collection, analysis and report writing
	Marine Mammal Surveyor (MMS)	<ul style="list-style-type: none"> Conduct baseline surveys and environmental impact assessment related projects Survey marine mammals using distance sampling methods In some cases, record observed marine litter or bird species 	<ul style="list-style-type: none"> Experience of conducting marine mammal surveys and familiarity with species ID and behaviours Methodical thinking, understand the process and follow the protocol to ensure correct data acquisition Ability to determine sea states and species presence Adaptability and willingness to work offshore for prolonged periods and in a variety of environmental conditions Experience on vessels at sea Data collection, analysis and report writing
	Environmental Advisor/Manager	<ul style="list-style-type: none"> Supervise megafauna mitigation, survey teams and project environmental requirements during operations Conduct or supervise assessments of sensitive receptors Encourage project sustainability practices and green initiatives on-site Produce and deliver project reports and provide recommendations on mitigations to meet project-permitting requirements Company representation to environmental regulators Ensuring equipment readiness, operating equipment and maintain delicate equipment 	<ul style="list-style-type: none"> Leadership and project management GIS software familiarisation (mapping) Report writing & database handling Ecological survey experience Develop marine fauna mitigation and monitoring plans for operations Experience on vessels at sea and willingness to work offshore for prolonged periods in a variety of environmental conditions Extensive knowledge of environmental regulations Ability to present scientific facts in a manner that can be understood by non-technical people Use of specialist equipment or technical skills (e.g. drone operation, programming)
	CMS Field Technologist (Camera Monitoring/Infra)	<ul style="list-style-type: none"> Install and operate large mounted camera systems Equipment and system maintenance Automatic manual data recording and analysis On-site condition monitoring Calibration of monitoring equipment 	<ul style="list-style-type: none"> Good IT skills Appreciation and understanding of site operations Experience conducting marine mammal surveys and familiarity with species ID and behaviours Methodical thinking, understand the process and follow the protocol to ensure correct data acquisition
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EARLY CAREER ASSOCIATES

Becoming an Early Career Associate is a natural progression for our student members.

Early Career Associates are entitled to reduced membership fees for up to five years, as they take the step from full time education or training into Associate Membership to support with the transition to full time employment. As part of this, we can provide guidance on the requirements to attaining professional registration (Technician, Registered/Incorporated or Chartered Status).

- Developing careers and building professional status
- Support for becoming professionally registered
- Expand professional networks
- Access to a wealth of learning resources



COMING SOON

Our Career Development Pathways will provide career journey progression support, fully engaged with, and enabled by the IMarEST, including mentorship and training, among others. These routes to progression will launch in late 2024.

Bursaries & Funding



We are committed to supporting lifelong learning, rewarding both those starting out in their careers and those at the cutting edge of new developments.

- [David Henderson Inspiring Journey](#)
- [Bil Loth Ocean Decade](#)
- [Stanley Gray Fellowship](#)
- [Lady Hamlyn Award](#)
- [Laurie Prandolini Research Fellowship](#)
- [Student Bursaries](#)
- [MMOA Bursary for Aspiring Marine Mammal Observers](#)
- [Kevin Tester Award](#)

[**www.imarest.org/education-and-training/awards**](http://www.imarest.org/education-and-training/awards)

IMarEST Marine Jobs

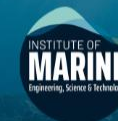
Helping you find your ideal role in marine engineering, science & technology.

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**MARINE
JOBS**

If you have any questions or would like any more information about the IMarEST, please contact one of our teams:

General Enquiries: info@imarest.org

Membership: membership@imarest.org

Press and Marketing: press@imarest.org

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Registered Charity No. 212992 • Registered Company No: RC000256 • Chief Executive: Chris Goldsworthy CEng CMarEng FIMarEST • Founded 1889. Incorporated by Royal Charter 1933 • Licensed body of the Engineering Council (UK) and the Science Council

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Thank you