Job Description

1. Job Details

Job Title:	PDRA in Aquatic Ecotoxicology	Department:	Science
Line Manager:	PI Arctic Marine Science	Grade and salary range:	Grade 5/6
Full Time/Part Time:	Full Time – 37 hrs per week	Duration of Appointment:	24 months

2. Job Purpose

- The PDRA will be working on a newly funded project looking at Calanus copepods as vectors of contaminants in the marine environment. They will primarily be responsible for a series of small boat-based experiments looking at the molecular, behavioural, and survival effects of various contaminants including heavy metals, pharmaceuticals, PFAS, and PAH.
- There will be several field campaigns in Loch Etive and in the Moray Firth to collect Calanus and water samples.
- The PDRA will lead work on data analysis and interpretation, as well as leading the communication of key findings through peer-reviewed papers and presentations at conferences and project meetings.
- SAMS is a teaching institute through the University of the Highlands and Islands, and there will be opportunities for the PDRA to deliver lectures and supervise students in research projects.

3. Main Responsibilities

Responsibility Areas	*Approx. % of time*
Lead stressor and ecotoxicology experiments on Calanus copepods and multiple effects analysis (molecular, physiological, behavioural, survival)	30
Data analysis and interpretation	20
Take part in Scottish fieldwork on small research vessels	10
Manage Calanus culture at SAMS	10
Contribute to regular multi-institute project meetings (online and in-person)	10
Communication and dissemination of results via peer-reviewed publications and conference presentations	15
Contribute to other SAMS institutional activities (e.g. teaching, student supervision, and engagement with research community)	5

Please note: Responsibilities, depth and outputs of activities will be adjusted where a candidate is appointed at Grade 6. At G6 there is an expectation that candidates will be more established in their career trajectory than Grade 5.

4. Planning and Organising

- Plan high quality experimental science. Manage work package activity, supervise agreed activities to ensure quality and delivery on time in line with project requirements.
- Oversee and liaise with other SAMS projects on all aspects regarding relevant research. Liaise with project partners timetabling the supply of relevant information.
- Assess project resource requirements, where necessary delegating maintenance and equipment purchases.
- Supervise students and interns, developing their planning and organisation skills.
- Plan publication strategy for projects, determining target journals, writing manuscripts and organising their publication in collaboration with co-authors.
- Plan time for supporting new grants or contracts.

5. Problem-Solving

- Solve problems encountered in the lab or field, seeking advice from colleagues when needed.
- Present any encountered problems to senior project colleagues, having already discussed and determined a possible appropriate solution with peers.

6. Decision-Making

- Determine best course of action for research – seeking advice from peers where appropriate.
- Where appropriate, delegate practical tasks to support scientists, interns and volunteer students.

7. Key Contacts/Relationships

- Discuss experimental findings and new ideas with scientific researchers and members of industry; to develop our respective research knowledge, agendas and future collaborations.
- Represent SAMS and projects at formal research and project meetings/conferences involving worldwide peers.
- Work in synchrony with other PDRAs, lab techs and members of the facilities team to ensure all necessary experimental facilities and experimentation run smoothly.
- Interact with students, volunteers and interns to develop their scientific skills.

8. Knowledge, Skills and Experience needed for the Job

- PhD in experimental aquatic biology or other appropriate discipline
- Expertise in marine invertebrate culture
- A good understanding of a range of techniques (marine invertebrate culture, ecotoxicology stressor experiments, behavioural observations, biomarker analysis, LC50 modelling) and evidence of applying these regularly.
- Molecular and chemical analytical skills preferable
- Strong proven experience in data handling and analysis

- Able to communicate findings via meetings, conferences and publication outputs.
- Track record of some income generating activities.

9. Dimensions – Scope of role

- Time to be spent at Environmental Research Institute, Thurso
- Manage own research work area to project requirements and deadlines and ensure deliverables are met to time and quality.
- Publish first and other named author publications – appx 1-2 per annum.
- Contribute to future bids – research/commercial.
- Continue to develop career trajectory.
- Supervise an undergraduate/master student project and progress this to publication where possible.
- Supervise interns, reducing practical requirements of role and allowing more time allocation towards paper and grant preparation.

10. Any other relevant information

You may also be asked to perform duties other than those given in the job description for the post. The particular duties and responsibilities attached to posts may vary from time to time without changing the general character of the duties or the level of responsibilities entailed.