**Job Description**

**1. Job Details**

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| Job Title:  | Senior PDRA in Seaweed Biotechnology | Department: | Science |
| Line Manager: | Professor and Associate Director of Science, Enterprise and Innovation | Grade: | Grade 6 |
| Full Time/Part Time: | Full Time (37hrs per week) | Duration of Appointment: | 3 years |

Introduction

This post will be expected to have an active role within SAMS Research Area in the [Blue Economy.](https://www.sams.ac.uk/science/blue-economy/)

The Blue Economy research area strives to channel SAMS’ diverse expertise in fundamental and applied marine science to support current and future commercial users of the marine environment without degrading the very system we all depend on.

The use of the oceans as a development space, and the decoupling of social and economic growth from environmental degradation, are at the centre of the scientific, education and commercial activities of the SAMS’ Blue Economy Research Area.

**2. Job Purpose**

* Discovery and applied research in the area of macroalgae/seaweed research, principally for cultivation and biochemical characterization of biomass.
* Deliver education activities (including teaching) at undergraduate and postgraduate level, as well as student supervision.
* Manage, organize and provide guidance on a number of science research facilities including lab management, organising science seminars, biological safety advisor, assisting CCAP (culture collection).

The post holder will work on a range of projects to underpin the research group of the line manager.

**3. Main Responsibilities**

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| *Role Description* | *Approx. %**of time* |
| **Research Activities*** Conduct fundamental and applied collaborative research into seaweed to deliver scientific outputs (e.g. scientific papers,) which can contribute towards the REF and SAMS reputation.
* Present at national/international conferences acting as an ambassador for SAMS.
* Write reports, contribute to research funding applications and deliver high quality science within the research group of the Associate Director for Science, Enterprise & Innovation.
* Provide, where required, managerial support, guidance and direction to support PIs and research facilities e.g in labs, culture collection, organising science seminar series, H&S etc.
 | 45 |
| **Teaching and Education Activities*** Teach at an Undergraduate level throughout the *Marine Science* degree program.
* Teach on Postgraduate taught courses at SAMS including ACES and IBioIC Blue Biotechnology courses.
* Supervise H4 UG dissertation students. Supervise PG students at a MRes and Ph.D. stage.
* Contribute to studentship proposals.
 | 15 |
| **Commercial Activities*** Engage in externally funded commercial activities to facilitate SAMS to meet its financial targets. This may involve working closely with our commercial unit, customers, delivery of commercially attractive work and writing of reports.
* Provide quality outputs and assist the unit and line manager to support future income streams.
 | 40 |
| Be pro-active in the management of SAMS Health & Safety procedures  | Ongoing |

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**4. Planning and Organising**

* Plan high quality experimental science and ensure its completion, as the responsible person.
* Liaise with other SAMS projects on all aspects regarding macroalgal/seaweed research. Communicate with project partners on timetabling issues and supply of relevant information and deliverable outcomes.
* Assess project resource requirements, where necessary delegating maintenance and equipment purchases.
* Co-supervise students, developing their planning, organisational, written and technical skills.
* Plan publications and report writing strategies for projects, scope out target journals, writing manuscripts and organising publication in collaboration with co-authors.
* Solve problems that occur in the lab, seeking advice from specialists or relevant staff members when necessary. For example, an equipment or analytical fault.
* Present any encountered problems to partners diplomatically, having already discussed and determined potential solutions with relevant peers.
* Address staffing issues and delegate tasks appropriate to ensure the successful completion of objectives/deliverables.

**6. Decision-Making**

* Determine the best/most appropriate course of action for research – seeking advice from peers and project partners where appropriate. For example, experimental design purposes and analytical equipment.
* Where appropriate delegate tasks to support staff, students, or interns.
* Involvement in publication and grant proposal strategies.

**7. Key Contacts/Relationships**

* Discuss experimental results with relevant staff at SAMS and relay key experimental findings with project partners; maintaining respective research knowledge and future collaborations.
* Day to day engagement with staff team, line manager and Enterprise and the Development team.
* Engagement with SAMS’ internal research community through our formal Research Areas.
* Represent SAMS/projects at national/international conferences and meetings.
* Liaise with other PDRAs, technical staff, facilities, and lab managers to ensure the smooth running and operation on equipment necessary to perform experimental work.
* Interact and supervise technical staff, student, and interns to ensure their own personal and professional development.

**8. Knowledge, Skills and Experience needed for the Job**

* Ph.D. in seaweed/macroalgae, mariculture, or plant science. Knowledge of bioprocessing/biorefinery approaches would be advantageous.
* A strong understanding of biochemical analysis would be highly useful.
* Fundamental understanding of experimental design, good lab practice, data handling, time/project management; especially in the areas of macroalgal research.
* Experience in science communication, specifically participation at national/international conferences, meetings with project partners, and publication/report writing.
* Evidence of contribution to funding applications – list in your CV including your contribution and percentage of time.

**9. Dimensions – Scope of role**

* Able to take a fundamental approach to the development of seaweed/macroalgal strains for commercially important products.
* Design and oversee experiments conducted by yourself, support scientists, and students.
* Complete all deliverables and publish research findings of consortium projects in high impact journals.
* Contribute to bids led by others and eventually conceive and prepare grant bids.
* Represent SAMS at national/international conferences.
* Each year 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**

The post holder may be required 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**.** If the normal duties of the post include going to sea (apart from small boats e.g. RHIB's) the applicant must be able to obtain the ENG1 medical certification and complete the STCW 95 Personal Survival Techniques training.

[WHAT SAMS CAN OFFER YOU](https://vimeo.com/411370772) (please right click and select ‘open in new tab’)

Introduction to our Science, Enterprise and Education

***Enterprise***

SAMS Enterprise provides specialist Marine consultancy and survey services, underpinned by cutting-edge science.

We deliver bespoke studies, surveys and research to local and national Government departments and agencies, international NGOs (WWF, World Bank, et al) and blue-chip industrial and financial companies.

***Research***

Our science focuses on three major and urgent challenges which humankind and our natural world must face:

* to discover the physical, chemical, geological and biological processes that drive the marine system so that we have the knowledge needed...
* to describe and quantify how our coastal environment, where more than half the human population resides, responds to ever-increasing man-made pressures such as climate change, habitat destruction, pollution and resource overexploitation and to work with society on developing and testing mitigation and adaptation measures and finally
* to develop a sustainable blue economy so that we can use the marine environment for the benefit of people without degrading its health and productivity.

To address these major challenges SAMS science is multi-disciplinary, drawing on the expertise from physicists, mathematicians, biologists, geologists, chemists, social scientists, computer scientists, technologists, engineers and communicators.

***Education***

We provide a marine science UG degree programme as well as a number of Postgraduate courses. We also provide CPD courses. For more information see [Study — The Scottish Association for Marine Science (sams.ac.uk)](https://www.sams.ac.uk/study/)

***Development***

SAMS has a Development arm which works with philanthropic funding bodies to support the world leading research and education at SAMS.

Our Values and culture

We strive to be a world-class marine science enterprise that underpins regional, national, and international policy, and societal action to secure healthy and sustainable oceans.

As a workforce, we have a strong family and team culture, helping each other to achieve our goals.

Remuneration

We offer a competitive salary and pension as well as employee benefits package. We also have a number of supportive policies to assist absence, family, and other leave types.

Career Goals

SAMS provides a supportive learning and career growth environment for those looking for that next step in their career or upskill in the workplace. This may be through opportunities to develop techniques, learn more about the science objectives for the group, gain some tutorial opportunities, as well as attend meetings and CPD events.

We’ll provide you with a good start as you join SAMS

SAMS provides an excellent induction which is a great introduction to the organisation, the facilities, your department and team, and provides that support that you need over the early months joining a new organisation. We will also provide you with office space, computing equipment and ensure this is ready for you on your first day of work.

Employee Benefits

In addition to a general remuneration package which includes a generous salary, pension, and sickness absence policy, we offer a number of employee benefits to our staff, some of which are listed below:

* Opportunity for discretionary hybrid working
* Purchase of additional annual leave – up to 20 days per annum
* Access to shopping discounts as well as local shop and leisure discounted memberships
* Cycle to work scheme
* Purchase of technology
* Payroll Giving
* Salary Sacrifice – pensions
* Access to wellbeing portals which provide support for mental health, nutrition and fitness and GP referral scheme
* Occupational health support
* Welfare support on site
* Access to CBT sessions
* Sabbatical scheme
* A number of training and development courses to assist you with your career development – leadership, coaching and mentoring.

SAMS is part of the University of the Highlands & Islands and holds an Athena SWAN Bronze award. SAMS is currently working towards a silver award.

As an Academic Partner of UHI, SAMS is designated as an educational establishment and subject to the provisions of the Protection of Children (Scotland) Act. Certain roles may be subject to a satisfactory check by Disclosure (Scotland) as a condition of their appointment.

Applications must include CV and Cover Letter and should be sent electronically to recruitment@sams.ac.uk quoting Job Ref. ‘D03/23.MS’ in the subject line.

The closing date for applications **12th May 2023**

**Interviews will be held by the beginning of June 2023**

*Please note, we prefer to contact referees prior to interview*

Guidance for Applicants

*Applying from overseas*

Applications from outside the UK are welcomed; where you currently have rights to work in the UK, please confirm when applying. Where you require sponsorship by an employer, please also advise when you apply. There are also a number of independent visas candidates may be eligible to apply for. All the details can be found here: <https://www.gov.uk/browse/visas-immigration/work-visas>

There are costs associated with working in the UK such as visas, health surcharges which you may wish to check out if you become a shortlisted candidate. The successful candidate will be responsible for their Visa and health surcharge costs.

Your application – what are we looking for?

We are looking for a full CV – please remember to document all your relevant work experience, listed with the most recent first. You should also include your educational achievements with you most recent qualification first.  You should include skills and competencies gained from previous employment or education. This should be specific to the job description.  Also, please include details of two referees, one referee at least from your current role, who we may contact if invited for interview.

We enjoy reading cover letters and these are an important part of the application. In the letter, connect your past accomplishments with the requirements listed in the job description. Focus on your most relevant experience, qualifications, and skills. Where possible, quantify your accomplishments with facts and data.

***Useful links***

* [How to write a flawless cover letter](https://career-advice.jobs.ac.uk/cv-and-cover-letter-advice/how-to-write-a-flawless-cover-letter-in-2020/) (please right click and select open in new tab)
* [How to write a CV](https://www.reed.co.uk/career-advice/how-to-write-a-cv/) (please right click and select open in new tab)