

## **PDRA in Physical Oceanography**

Oban, Scotland

Fixed term appointment for 2 years

£27,285 - £30,688 per annum



The pre-eminent scientific challenge of the 21st Century is to understand the drivers of Earth's climate. The North Atlantic subpolar ocean is closely coupled to Arctic, European and tropical regions through the atmosphere, and is strongly linked to decadal climate variability. At SAMS we are researching the physical processes of ocean-atmosphere interaction and circulation.

SAMS has a leading role in developing sustained observing programmes in the subpolar Atlantic for example through joint leadership of the International Overturning in the Subpolar North Atlantic Programme (<http://www.ukosnap.org/> & <http://www.o-snap.org/>). OSNAP is a world leading subpolar transatlantic mooring array purposefully designed to elucidate links between Atlantic circulation and climate. You will be responsible for taking a leading role in analyzing observations from the NERC funded OSNAP programme.

We seek a Post Doctoral Research Associate to manage and develop SAMS expertise in basin scale ocean observations for climate and to become a future leader in the field.

The main duties of the position are:

1. Contribute to the planning and execution of glider based field programmes.
2. Lead and publish high quality peer-reviewed research.
3. Form and maintain national and international relationships and collaborations.
4. Travel to national and international meetings to present research findings.

For general enquiries about the position please contact:  
*Prof. Stuart Cunningham* at [Stuart.Cunningham@sams.ac.uk](mailto:Stuart.Cunningham@sams.ac.uk) or  
*Prof Mark Inall* on [Mark.Inall@sams.ac.uk](mailto:Mark.Inall@sams.ac.uk)

Further information is available on line at [www.sams.ac.uk](http://www.sams.ac.uk). Alternatively, please write to: Human Resources, The Scottish Association for Marine Science, Scottish Marine Institute, Oban, Argyll PA37 1QA or e-mail [recruitment@sams.ac.uk](mailto:recruitment@sams.ac.uk)

The closing date for receipt of applications is **Friday 9<sup>th</sup> November 2018**

*SAMS is a registered Scottish charity (SC 009206), has an equal opportunities policy and welcomes applications from all sections of the community.*

# Job Description

## 1. Job Details

Job Title	PDRA in Physical Oceanography	Department	Science
Line Manager	Professor & PI in Physical Oceanography	Grade	5
Full Time/Part Time (no. of hrs for part time)	Full Time	Duration	2 years

## 2. Job Purpose

The purpose of this job is to support the physical oceanographic observations being made as part of UK-OSNAP (Overturning in the Subpolar North Atlantic Programme) and to undertake scientific research with those observations in collaboration with national and international partners.

## 3. Main Responsibilities

<i>(Normally between 4 and 10. Percentages should total at least 95% (and no more than 100%))</i>	Approx. % of time
1. Responsible for the planning and execution of glider missions.	5
2. Responsible for the reduction of raw mooring and glider data to research data conforming to world leading standards; ensuring compliance with the International and UK national data policies.	10
3. Scientific Research: Lead and support high-quality peer-review research within OSNAP with a focus on data obtained during OSNAP and collaborating with UK-OSNAP partners at the NOC and Universities of Liverpool and Oxford.	70
4. Teaching duties: Contribute to post graduate and undergraduate teaching and supervision (provision of teaching material, demonstrations, labs, occasional lectures).	5
5. National & international relationships: To develop appropriate local, national and international collaborations for scientific research.	5
6. Travel to national and international OSNAP project meetings is required	5
Be pro-active in the application of SAMS Health and Safety Procedures	ongoing

## 4. Planning and Organising

- Plan for the UK mooring and glider programme over the 4 year of OSNAP.
- Plan the reduction of raw mooring and glider data to research data.

## 5. Problem-Solving

- Intercalibration of different measurement platforms to get the most accurate research data - use of world standard procedures, and possible development of new procedure in agreement with the community.
- Manage time between cruise preparation/execution, data quality-control/analysis, and scientific research - be organised.

### 6. Decision-Making

- Best method to process and analyse the data.
- Lead and support reports writing and peer-reviewed research articles.
- Potentially leading oceanographic research cruises.

### 7. Key Contacts/Relationships

- Work directly with people from the department through the OSNAP project.
- Collaborate with international and UK partners (at the NOC and Universities of Liverpool and Oxford).

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

Qualifications required for the post e.g. degree, professional qualifications	The applicant will: <ul style="list-style-type: none"> <li>• Possess a Ph.D. in Earth Science Research, with a particular focus on the analysis and interpretation of observations.</li> <li>• Possess a first degree in Mathematics, Physics or a degree with a particular focus on numerical analysis.</li> <li>• Track record in publishing and report writing.</li> </ul>
Relevant experience required for post	<ul style="list-style-type: none"> <li>• Will have an extensive understanding of ocean dynamics and the role of the ocean in climate.</li> <li>• Will have participated in field based research programmes, including active participation at sea.</li> </ul>
Generalist Experience (e.g. team working)	<ul style="list-style-type: none"> <li>• Must be sociable and a team player, yet be clear on individual role within the project.</li> <li>• Able to adapt to changing circumstances and demands.</li> <li>• Has been part of an active research group.</li> </ul>
Interpersonal, communication and social skills	The project is a large national and international effort. <ul style="list-style-type: none"> <li>• Communication, cooperation and persuasion are critical skills.</li> <li>• High quality written and oral skills.</li> <li>• Self-confidence, and ability to listen, evaluate and act appropriately on information.</li> <li>• Has been part of an active research group with national or international connections</li> </ul>
Management skills and experience (Line management, project management, financial management etc.)	<ul style="list-style-type: none"> <li>• Some familiarity with activities required of a project manager.</li> <li>• Project management experience.</li> <li>• Participated on research cruises.</li> <li>• Planned and executed experimental field work.</li> </ul>
Professional Memberships: Specialist Skills: Added values:	<ul style="list-style-type: none"> <li>• International travel: Candidate will be expected to travel to international conferences to represent their research and the international aspects of the project.</li> <li>• Recognised measures of esteem.</li> </ul>

Teaching skills (if applicable)	<ul style="list-style-type: none"> <li>• Some track record in undergraduate teaching.</li> </ul>
Health & Physical	<ul style="list-style-type: none"> <li>• Must pass the ENG1 medical.</li> <li>• The ability to attend on a regular basis and cope with the demands of the job</li> <li>• Ability to work at sea.</li> </ul>

### **9. Dimensions – Scope of role**

- The job will affect directly or indirectly all the staff in the department
- Responsibility for the budget of the OSNAP glider and mooring programme

### **10. Other 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 includes 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.

**Although advertised as a 2 year fixed appointment, the appointment period may vary slightly depending on starting salary and starting date. This is due to the funding available.**