



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Sea Ice Altimetry, Centre for Polar Observation and Modelling (CPOM), Faculty of Environment



Salary: Grade 7 (£33,199 - £39,609 p.a.)

Reference: ENVEE1308

Closing date: 31 March 2019

Fixed-term until 31 March 2021

Job share and flexible working will be considered for this post

Research Fellow in Sea Ice Altimetry, Centre for Polar Observation and Modelling, Faculty of Environment

Are you an ambitious scientist looking for your next challenge? Do you have a PhD (or near to completion) in a quantitative subject, an interest in polar research and the skills to develop our satellite altimetry capability?

The Centre for Polar Observation and Modelling (CPOM) is seeking to recruit a research fellow in Sea Ice Altimetry, with emphasis on investigating historical and ongoing changes in the Arctic and Antarctica.

CPOM uses state-of-the-art Earth observation and modelling techniques to study the polar regions. The centre receives long-term strategic funding from the Natural Environment Research Council (NERC), in partnership with the British Antarctic Survey (BAS). It also works closely with the National Oceanography Centre (NOC), and with the European Space Agency (ESA) on current and future satellite missions, including CryoSat-2, as well as many other national and international partners. The CPOM Directorate is based in the School of Earth and Environment at the University of Leeds, with researchers distributed across the UK.

In this role, you will lead a programme of sea ice altimetry research, focusing on measuring and monitoring the thickness and volume of historical and current sea ice in both hemispheres. This will involve exploiting recent developments in satellite radar altimetry and the resulting increase in the availability, volume, frequency and quality of Earth observation data.

Although based at the heart of the CPOM team in Leeds, you will work with scientists across our partner universities, including CPOM's sea ice modelling team at the University of Reading. In addition, you will liaise with ESA, BAS, NOC, the UK Met Office and other institutions as appropriate to contribute to CPOM's scientific objectives.

You will have a PhD (or close to completion ie the initial thesis needs to have been handed in at the point of application) in a relevant subject such as physics, mathematics, computer science or engineering. In addition, you will demonstrate an enthusiasm for scientific research and problem-solving, excellent communication and interpersonal skills, and the ability to work as part of the wider CPOM team.



What does the role entail?

As CPOM Research Fellow in Sea Ice Altimetry, your main duties will include:

- Pursuing a programme of research on sea ice using satellite radar altimetry, focusing on both establishing historical trends in and assessing current sea ice volume and thickness;
- Contributing to CPOM's overall radar altimetry work programme, promoting the integration of sea ice altimetry with other research interests and themes across CPOM;
- Maintaining awareness of the latest developments in near real time sea ice data provision, working with partner institutions in coordinating data acquisition and interpretation;
- Developing and evaluating dynamic snow load over sea ice;
- Working with others in CPOM, ensure that the research has the potential for impact beyond academia, for example through the development of the CPOM near real time data portal;
- Collaborating with CPOM's partners at ESA, BAS, NOC, UKMO and elsewhere;
- Publishing results in peer reviewed journals and present at national and international meetings;
- Identifying new areas of research/develop new research methods as appropriate;
- Contributing information to research proposals and funding applications as required.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

As CPOM Research Fellow in Sea Ice Altimetry, you will have:

- A PhD (or close to obtaining ie the initial thesis needs to have been handed in at the point of application) in remote sensing, physics, mathematics or a related subject;



- Experience of working with climate reanalysis data;
- Ability to independently develop and successfully carry out own research ideas;
- Experience of authoring publications in high-impact journals relating to satellite radar altimetry/sea ice research;
- Track record of oral presentations at international meetings;
- Excellent interpersonal skills with the ability to work as part of a team;
- Ability to prioritise competing demands and work to multiple deadlines.

You may also have:

- Significant experience as a researcher in the field beyond your PhD;
- Experience of working with radar altimeter data;
- Experience with airborne and in situ measurements;
- Experience of collaborating with external and international research partners;
- Experience of contributing to research proposals;
- Experience of polar fieldwork;
- Experience of project management;
- Experience of managing junior staff;
- Demonstrated ability to communicate with non-scientific audiences in written/verbal form.

How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information page. Applications should be submitted by **23.59** (UK time) on the advertised closing date.

Contact information

To explore the post further or for any queries you may have, please contact:

Professor Andy Shepherd

Tel: +44 (0)113 343 9014

Email: a.shepherd@leeds.ac.uk.



Additional information

Find out more about the [Faculty of Environment](#).

Find out more about our [Research and associated facilities](#).

Working at Leeds

Find out more about the benefits of working at the University and what it's like to live and work in the Leeds area on our [Working at Leeds](#) information page.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found in our [Accessibility](#) information or by getting in touch with us at disclosure@leeds.ac.uk.

Criminal record information

Rehabilitation of Offenders Act 1974

A criminal record check is not required for this position, however, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our [Criminal Records information](#).

