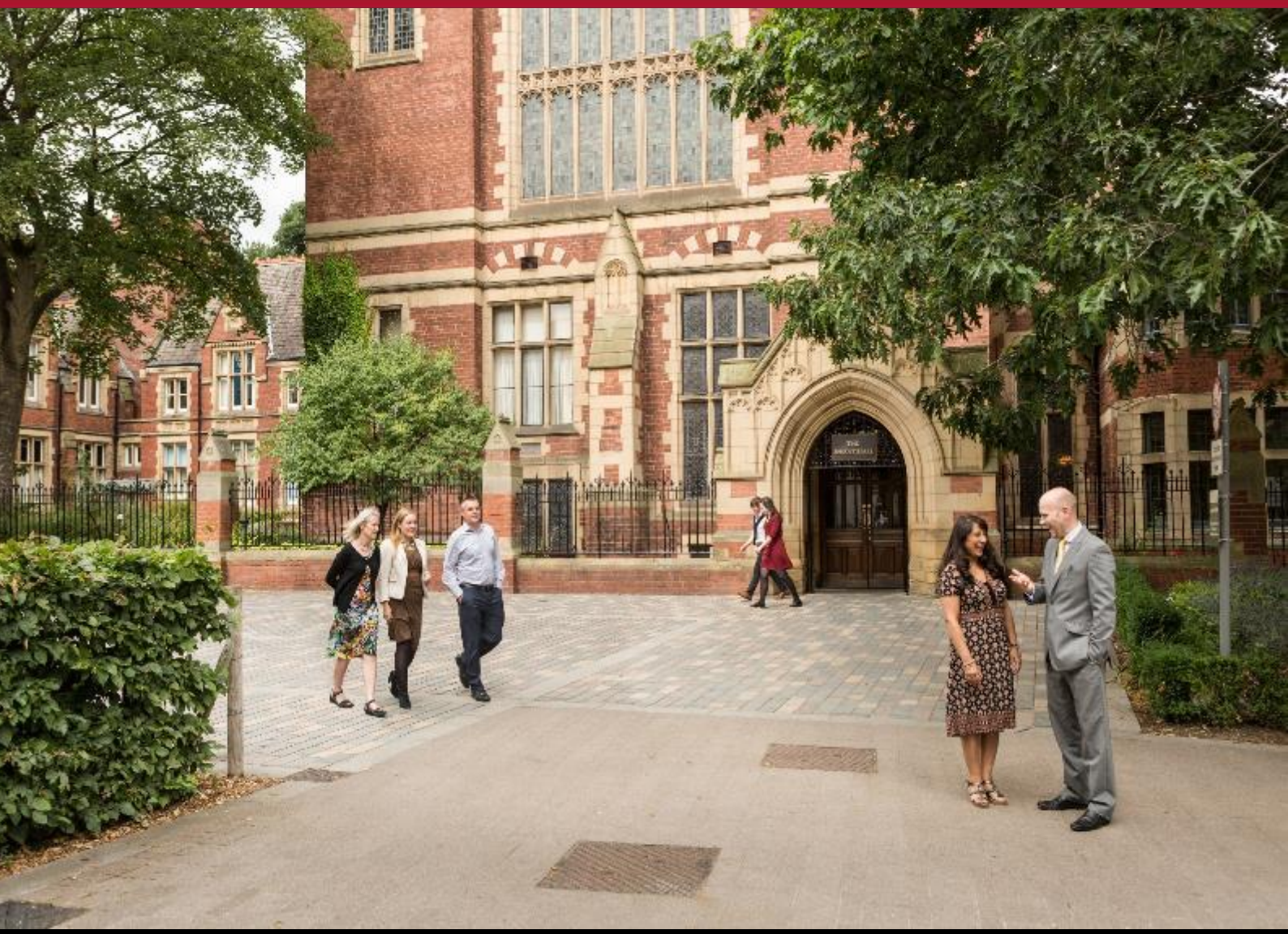
UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Constraining Uncertainty of Multi-Decadal Climate Projections - CONSTRAIN, Faculty of Environment



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

Due to funding limitations the post will be appointed at no higher than spine point 31 (£34,189 p.a.)

Reference: ENVEE1326

Closing date: 9 June 2019

Fixed-term until 30 June 2023

We will consider job share / flexible working arrangements

Research Fellow in Constraining uncertainty of multi-decadal climate projections – CONSTRAIN,

School of Earth and Environment, Faculty of Environment, Affiliated to the Priestley International Centre for Climate.

Are you an ambitious researcher looking for your next challenge? Do you have a background in climate science? Do you want to further your career in one of the UK's leading research intensive Universities?

You will join a team of climate scientists at the University of Leeds to work on an EU Horizon 2020 funded project (Constraining uncertainty of multi-decadal climate projections - CONSTRAIN). You will work with **Dr Amanda Maycock** and **Prof Piers Forster** to investigate aspects of the large-scale atmospheric circulation response to external forcing (e.g. due to aerosols, greenhouse gases) with an emphasis on the midlatitudes. You will examine the relationships between sea surface temperature patterns and atmospheric circulation using observation datasets and ensembles of climate models. You will also examine the mechanisms for "rapid adjustments" to forcing that are independent of sea surface temperature changes. A key goal of CONSTRAIN is to identify physical constraints on the climate response to forcing and apply these to future projections. A significant part of the project will involve knowledge translation to make the latest climate science accessible to mitigation and adaptation decision makers. The research at Leeds will play the central role as part of a large consortium project in collaboration with 13 other leading institutions across Europe. You will have opportunity for secondment and travel to these leading institutions, it is envisaged that these trips will be for up to one month to other research institutions in Paris, Hamburg, Toulouse and Oslo, with a maximum of two trips over the duration of the contract.

You will have, or be close to obtaining, a PhD in the field of Atmospheric, Ocean or Climate Science and have extensive experience of using models and observations to study climate and dynamical processes. You will have knowledge of atmospheric dynamics. Experience of investigating the response of atmospheric circulation to external forcing or future projections of circulation changes is desirable. You will have evidence of a strong commitment to publishing scientific results at an international level and also of writing for a broader audience.

What does the role entail?

As a Research Fellow, your main duties will include:

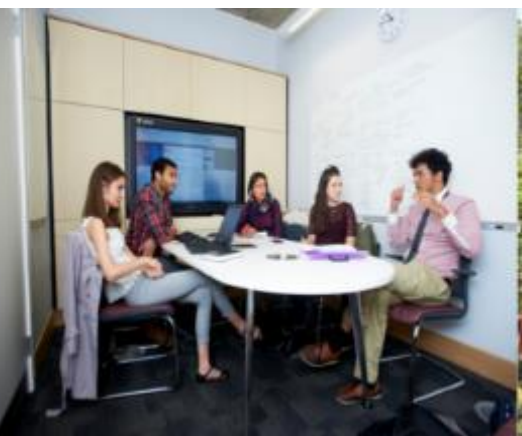
- Working with and in support of Dr Maycock and Prof Forster to ensure the objectives and deliverables of the CONSTRAIN project are successfully met;
- Generating and pursuing original research ideas in the appropriate subject area;
- Developing research objectives and contributing to the direction of the research project in close collaboration with EU partners;
- Evaluating methods and techniques used and results obtained by other researchers and to relate such evaluations appropriately to your own work;
- Preparing papers for publication in leading international journals and disseminating research results through other recognised forms of output;
- Working both independently and also as part of a larger team of researchers, engaging in knowledge-transfer activities where appropriate and feasible;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate;
- Contributing to joint synthesis reports and dissemination activities across the consortium;
- Contributing to the research culture of the School and Priestley Centre, where appropriate;
- Contributing to the training of both undergraduate and postgraduate students, where appropriate, including assisting with the supervision of projects in areas relevant to the project;
- Assisting with policy and public engagement efforts throughout the project.

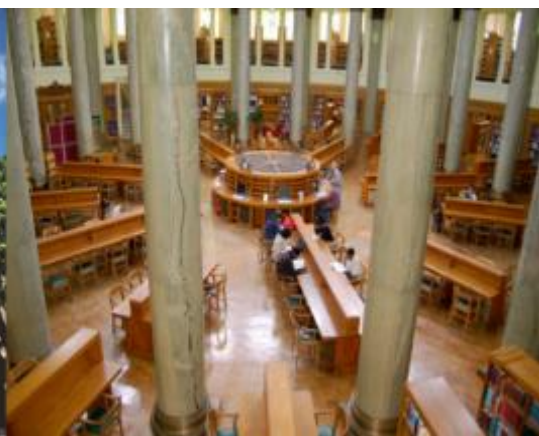
These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

As a Research Fellow you will have:

- A PhD (or close to completion i.e. the initial thesis needs to have been handed in at) in Atmospheric, Ocean or Climate Science or a closely allied discipline;
- A strong background in scientific programming (e.g. Python, Matlab);





- Excellent knowledge of atmospheric dynamics and large-scale climate processes;
- Extensive experience of analysing complex climate datasets including climate model output;
- An ability and willingness to spend up to a few weeks over the duration of the project seconded to other EU institutions;
- Proven ability to write for expert and non-expert audiences;
- Good time management and planning skills, with the ability to meet tight deadlines, manage competing demands and work effectively under pressure without close support;
- A proven track record of peer-reviewed publications in high impact factor journals;
- Excellent written and verbal communication skills including presentation skills;
- A proven ability to work well both individually and in a team;
- A strong commitment to your own continuous professional development.

You may also have:

- Experience of pursuing external funding to support research;
- Experience of performing simulations with global climate models;
- Knowledge of atmospheric dynamics in the midlatitudes.

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:

Dr Amanda Maycock, Associate Professor in Climate Dynamics
Tel: 0113 343 9793
Email: A.C.Maycock@leeds.ac.uk

Additional information

Find out more about the Faculty, our School and the Priestley International Centre for Climate.

Find out more about Equality and Inclusion and Athena Swan in the Faculty and the University.

A diverse workforce
The Faculty of Environment is proud to have been awarded the Athena SWAN Bronze Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our equality and inclusion webpage provides more information.

Working at Leeds
Find out more about the benefits of working at the University and what it is 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 on our Accessibility information page 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 page.