

CANDIDATE BRIEF COMET Research Fellow in Earth Observation and Geoinformatics



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)

Reference: ENVEE1316

Closing date: 15 May 2019

Fixed term for 24 months

This post is open to flexible working and job share

COMET Research Fellow in Earth Observation and Geoinformatics, School of Earth and Environment, Faculty of Environment.

Are you an ambitious researcher looking for your next challenge? Do you have a background in Earth science and skills in geoinformatics and Earth Observation? Are you interested in using your skills to help reduce disaster risk?

The <u>Centre for Observation and Modelling of Earthquakes, Volcanoes and Tectonics</u> (COMET) is seeking to recruit a research fellow in geoinformatics to join our team working on a major new Global Challenges Research Fund (GCRF) initiative, the Multi-hazard Urban Disaster Risk Transitions Hub.

COMET is a world-leading research centre based in the School of Earth and Environment at the University of Leeds, and involving researchers from across the UK. We use state-of-the-art Earth observation techniques, including Synthetic Aperture Radar Interferometry (InSAR), to study earthquakes and volcanoes, and help understand the hazards they pose.

The GCRF Multi-hazard Urban Disaster Risk Transitions Hub is an international collaboration aiming to produce new understanding of multi-hazard for four target cities, and inform policy development on risk reduction as a result. The overall aim is to reduce disaster risk for the urban poor, focusing on Istanbul, Kathmandu, Istanbul and Quito.

This role will focus specifically on using Earth Observation techniques, primarily using satellite data, to produce data sets and derived information on hazard that can be used by Hub partners in achieving the wider project aims. You will be responsible for the processing and analysis of satellite data sets including InSAR and high resolution optical imagery, disseminating the results to expert and non-expert users, and providing training in methods. Although based in the School of Earth and Environment, you will be expected to work with scientists from partner institutions in the Hub and in COMET, both in the UK and overseas.

With a PhD (or close to obtaining) or equivalent industrial experience, you will have excellent communication skills, the ability to work as part of a team, and experience in producing, analysing and/or disseminating Earth Observation data.



What does the role entail?

As COMET Research Fellow in Earth Observation and Geoinformatics, your main duties will include:

- Processing and analysing satellite data, focusing on InSAR data from the European Space Agency's Sentinel-1 mission, and high-resolution optical data;
- Working with other COMET scientists to instruct, support and supervise other members of the Hub in the use of Earth Observation data;
- Contributing to wider COMET and Hub research, participating in meetings and discussions, and contributing to outreach and training activities as required;
- Developing and maintaining web-based portals in collaboration with IT specialists to make information accessible to both expert and non-expert users;
- Preparing results for publication in peer-reviewed journals;
- Presenting work at national and international conferences, meetings and workshops;
- Planning and managing your own research activity in collaboration with others and within the strategy identified for the project team as a whole;
- Identifying other research project opportunities and directions as they arise, and assisting in the writing of grant proposals.

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 COMET Research Fellow in Earth Observation and Geoinformatics you will have:

- A PhD (or be close to obtaining one ie the initial thesis needs to have been handed in at the point of application) in Earth Sciences, preferably with a specialism in Earth observation, geoinformatics or a related discipline, or you will have equivalent experience;
- Experience in producing, analysing and/or disseminating large volumes of satellite data;
- A publication track record (or evidence of forthcoming publications) in relevant topics;
- Experience in computer programming or scripting;



- Ability to work in a team and independently;
- Excellent communication and presentation skills;
- Ability to work accurately and carefully, meet deadlines and maintain a professional approach to all aspects of the role;
- Initiative in tackling research problems.

You may also have:

- Experience of processing InSAR data;
- Experience in the production of point cloud data from high-resolution optical imagery;
- Experience of systems for disseminating data such as webGIS.

How to apply

You can apply for this role online; more guidance can be found on our <u>How to Apply</u> 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 Tim Wright tel: +44 113 343 5258, mailto:t.j.wright@leeds.ac.uk

Dr Susanna Ebmeier tel: +44 113 343 0453, mailto:s.k.ebmeier@leeds.ac.uk

Dr John Elliott tel: +44 113 343 0457, mailto:j.elliott@leeds.ac.uk

Additional information

Find out more about the Faculty of Environment.

Find out more about Athena Swan in the Faculty.

Find out more about our School.



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 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 <u>Accessibility</u> information page or by getting in touch with us at <u>disclosure@leeds.ac.uk</u>.

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 <u>Criminal Records</u> information page.

