

CANDIDATE BRIEF

Research Assistant in High Mountain Environments, Faculty of Environment



Salary: Grade 6 (£32,296 – £37,999 p.a. depending on experience) Reporting to: Dr C Scott Watson Reference: ENVGE1252 Fixed term for 36 months to complete specific time limited work Location: University of Leeds (with scope for hybrid working) We are open to discussing flexible working arrangements

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Overview of the Role

Are you experienced in GIS and working with geospatial data? Are you interested in undertaking fieldwork to help reduce disaster risk in Nepal? Do you want to further your career in one of the UKs leading research-intensive Universities?

We are looking for a Research Assistant in High Mountain Environments to complete an important role in a UKRI Future Leaders Fellowship project (4+3 years): *Glacial Lake Observatory for Flood Hazards Impacted by Changing Climate (GLO-FHICC)* awarded to Dr C. Scott Watson (PI). As glaciers disappear, thousands of glacial lakes are forming. Yet their location in high-altitude and logistically challenging environments means observations are sparse, including essential measurements of water storage and potential hazard. This project will investigate lake development processes and glacier-related flood hazards to enhance disaster preparedness and increase water security across High-Mountain Asia. The project will integrate satellite data, numerical modelling, and fieldwork to provide the foundations for systematic and open access glacial lake monitoring.

You will collect field data in Nepal and the UK, which will underpin analysis of flood hazard and high-altitude glacial lakes. You will also work to collate and analyse a range of geospatial datasets through literature review and satellite data analysis, and then integrate these data into an interactive online platform, which will be developed by a team of specialist software engineers at the University of Leeds.

You will work closely with Dr C. Scott Watson, alongside other project staff, students, and researchers in the Faculty.

With a MSc (or close to obtaining) or equivalent industrial experience, you will have excellent computational and fieldwork skills, the ability to work as part of a team, and experience in GIS and geospatial datasets.



Main duties and responsibilities

- Supporting and undertaking three field trips in the Nepal Himalaya (1,000– 5,500 m a.s.l) to collect data;
- Processing and analysing aerial imagery to generate digital elevation models;
- Working closely with a team of specialist software engineers and project partners to create and maintain an online interactive Glacial Lake Observatory platform;
- Collating, analysing, and presenting data and figures to inform the direction and progression of the project;
- Writing reports, undertaking literature reviews and preparing papers for publication, with guidance as necessary;
- Working both independently and as part of a larger team of researchers and stakeholders;
- Supporting research activities, including contributing to research results and outputs and to the generation of independent and original ideas, ensuring a successful programme of investigation;
- Participating in the research group and presenting research output where appropriate;
- Contributing to the research culture of the School, where appropriate;
- Continually updating your knowledge, understanding and skills in the research field.

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.

Qualifications and skills

<u>Essential</u>

- A master's degree (or close to completion i.e. thesis submitted) in physical geography, environmental science, or a closely allied discipline, or equivalent industrial experience;
- A strong background in working with geospatial datasets in GIS or through programming;



- Experience of fieldwork and the desire to work at high altitude (1,000–5,500 m a.s.l) remote locations in Nepal over three trips of typically 4–6 weeks each, led by the PI and supported by a professional logistics team;
- Well-developed analytical skills;
- Good interpersonal and communication skills, both written and verbal and the ability to communicate effectively with a wide range of stakeholders;
- Good time management and planning skills, with the ability to meet tight deadlines;
- A proven ability to work well both individually and in a team;
- The ability to work unsupervised and to use your own initiative;
- A strong commitment to your own continuous professional development.

<u>Desirable</u>

- Experience of programming (e.g. R, Python, or MATLAB);
- Experience of systems for disseminating data such as website development or web GIS;
- Experience of working with satellite data, aerial imagery, or drones;
- Experience of contributing to the writing of papers or reports for publication.

Additional information

Please note: If you are not a British or Irish citizen, from 1 January 2021 you will require permission to work in the UK. This will normally be in the form of a visa but, if you are an EEA/Swiss citizen and resident in the UK before 31 December 2020, this may be your passport or status under the EU Settlement Scheme.

Please note that due to Home Office visa requirements, this role may only be suitable for first-time Skilled Worker visa applicants if they are eligible for salary concessions. For more information please visit: www.gov.uk/skilled-worker-visa

For research and academic posts, we will consider eligibility under the Global Talent visa. For more information please visit: <u>https://www.gov.uk/global-talent</u>

Find out more about the Faculty of Environment

Find out more about the School of Geography



Find out more about our <u>Research and associated facilities</u>

Find out more about equality in the Faculty

Our University

As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the Faculty of Environment we are dedicated to diversifying our community and we welcome the unique contributions that individuals can bring, and particularly encourage applications from, but not limited to Black, Asian and ethnically diverse people; people who identify as LGBT+: with and people disabilities. Candidates will always be selected based on merit and ability.

The Faculty of Environment has received a prestigious Athena SWAN silver award from <u>Advance HE</u>, the national body that promotes equality in the higher education sector. This award represents the combined efforts of all schools in the Faculty and shows the positive actions we have taken to ensure that our policies, processes and ethos all promote an equal and inclusive environment for work and study.

Working at Leeds

We are a campus based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit our <u>Working at Leeds</u> 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

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.

