

## Research Associate in River Science

Stuck in the mud: addressing the fine sediment conundrum with multiscale and interdisciplinary approaches to support global freshwater biodiversity

Job Ref: REQ260262

### School/Department Summary

The School of Social Sciences and Humanities is a diverse and inclusive School delivering excellence in learning and teaching, research, and enterprise across the Social Sciences and Humanities. Inter-disciplinarity and international encounters are fostered across six departments: Communication and Media; Criminology, Sociology and Social Policy; English; Geography and Environment; International Relations, Politics and History and Law. Geography and Environment is consistently ranked within the top 10 of UK university rankings, and has a thriving, inclusive, research community and culture. Geography and Environment is internationally recognised for its research in geographies of children, youth and families.

Geography and Environment: [Geography and Environment | Loughborough University](#)

### Project Description:

This is an exciting opportunity to play a key research role in the second phase of a successful UKRI funded research project that will develop a mechanistic understanding of how environmental controls drive fine sediment impacts for freshwater biota.

Fine sediment (typically defined as particles <2mm) deposition in riverine ecosystems represents a critical anthropogenic threat to global freshwater biodiversity. Despite the extent and magnitude of this threat we lack fundamental knowledge about the mechanisms controlling the ecological effects of fine sediment. This knowledge is required to underpin the implementation of effective river management strategies. The objective of the project is to identify, examine and quantify the primary abiotic and biotic controls influencing the ecosystem effects of instream sedimentation.

### Job Description

**Job Family and Grade:** Specialist and Supporting Academic Grade 6

### Job Purpose

To participate in an interdisciplinary project on the environmental controls of riverine fine sediment deposition and the consequences for freshwater biodiversity. This will be achieved by undertaking a regular fieldwork campaign (monthly) in addition to ecological laboratory experiments. There will be opportunities to work closely with collaborators across the globe working undertaking research on similar issues (e.g. New Zealand, Canada). The post will be predominately based at Loughborough University.

### Job Duties

- Be responsible for conducting the day to day running of sub-projects.
- Organise, lead and oversee fieldwork campaigns.

- Undertake macroinvertebrate sample processing in the laboratory including picking of invertebrates from samples and subsequent identification to species level where possible.
- Plan and undertake ecological experiments in the laboratory.
- Oversee progress on the sub-projects including liaising with research assistant employed on the programme of work.
- Contribute to the formulation of detailed plans for the project in association with Dr. Kate Mathers.
- Feedback to the project team on progress and make recommendations for next steps throughout the project.
- Write regular progress reports and present outcomes to collaborators.
- Organise, attend and present at stakeholder and project partner meetings.
- Independently organise and analyse the environmental and ecological datasets obtained.
- Enhance relationships with existing collaborators / project partners and assist in the establishment of relationships with new collaborators.
- Lead and collaborate on research papers for publication in high quality academic journals.
- Attend and present at national and international conferences.
- Manage and develop online materials, blogs and social media as appropriate.
- Maintain an up-to-date awareness of current and emerging research relevant to the project and contribute ideas for new research directions as appropriate.
- Maintain confidentiality at all times and ensure that intellectual property (IPR) agreements are not violated.
- Undertake training programmes in the University and externally that are consistent with the needs and aspirations of the project and those of the Department.
- Undertake other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.

### **Points To Note**

The purpose of this job description is to indicate the general level of duties and responsibility of the post. The detailed duties may vary from time to time without changing the general character or level of responsibility entailed.

### **Special Conditions**

All staff have a statutory responsibility to take reasonable care of themselves, others and the environment and to prevent harm by their acts or omissions. All staff are therefore required to adhere to the University's Health, Safety and Environmental Policy & Procedures.

All staff should hold a duty and commitment to observing the University's Equity & Diversity policy and procedures at all times. Duties must be carried out in accordance with relevant Equity & Diversity legislation and University policies/procedures.

Successful completion of probation will be dependent on attendance at the University's mandatory courses which include Respecting Diversity and, where appropriate, Recruitment and Selection.

### **Organisational Responsibility**

Reports to the PI, Geography and Environment, Loughborough University

## Person Specification

Your application will be assessed based on the essential and desirable criteria listed below. Applicants are strongly encouraged to explicitly demonstrate how they meet each essential (and desirable) criteria at the application stage. The criteria that you need to demonstrate in your application will be listed as Stage 1 in the table below.

Stages of assessment are as follows:

- 1 – Criteria measured at Application
- 2 – Criteria measured at Test/Assessment Centre/Presentation
- 3 – Criteria measured at Interview

### Essential Criteria

Area	Criteria	Stage
Experience	Experience of quantitative data analyses using software packages such as 'R', Matlab or similar	1,2,3
	Experience of undertaking univariate and multivariate data analyses	1,2,3
	Experience of working with freshwater macroinvertebrates	1,2,3
	Experience of planning and leading fieldwork campaigns	1,2,3
Skills and abilities	Excellent written and oral communication skills which give you the ability to engage with colleagues, academics and stakeholders	1,2,3
	Ability to work independently <u>and</u> as part of a collaborative team	1,3
	Excellent time management and ability to complete agreed work commitments on time	1,3
	Excellent IT skills	1
	Ability to make technical presentations to stakeholders	1,3
	Identification of macroinvertebrates preferably to species level	1,3
	Support and manage researchers employed on the wider programme of research	1,2,3
Training	Demonstrate a willingness to undertake further training as appropriate and to adopt new procedures as and when required.	1,3
Qualifications	PhD (or near completion) in Geography, Environmental Science, Ecology or discipline of relevance to the project.	1,3
Other	Commitment to observing the University's Equal Opportunities policy at all times.	1,3

### Desirable Criteria

Area	Criteria	Stage
Experience	Authoring original research in the highest quality refereed academic journals	1,3
	Experience of designing and undertaking ecological experiments	1,2,3
	Experience of working with stakeholders or undertaking applied research	1,3
	Experience of working with sedimentological data	1,2,3
	Track record of contributing and/or developing collaborative research networks	1,2,3
	Experience of presenting research at international conferences	1
	Authoring original work for technical stakeholder reports	1,3
Skills and abilities	Willingness to relocate to Loughborough or the surrounding area	1,3

## Conditions of Service

The appointment will be subject to the [University's Terms and Conditions of Employment](#) relevant to the job grade.

## Shared University Responsibilities

As a member of the Loughborough community, you are expected to:

- Take reasonable care of yourself, others and the environment, and to prevent harm by your acts or omissions. All staff are therefore required to adhere to the University's Health, Safety and Environmental Sustainability Policies & Procedures.
- Support and contribute to the University's commitment to principles of equity, diversity and inclusion (EDI) while carrying out all duties, behaving in a manner that treats others with dignity and respect and upholds every person's right to lawful freedom of expression, freedom of speech and academic freedom. Further information about EDI at Loughborough and our strategic aims is available on our website.

## Our Purpose, Vision, and Values

Our purpose, Vision and Values underpin all that we do and shape how we work together at Loughborough.

We're proud to promote our values: **Adventurous, Collaborative, Creative, Authentic** and **Responsible**. Our people bring these values to life every day, and they are central to the positive and supportive culture that makes Loughborough unique.

If you join us, you'll be encouraged to bring these values to life in your own work and contribute to the positive, supportive culture that makes Loughborough unique.

Read more about our [vision and values](#).

## Our Accreditations



We strive to create a culture that supports equality and celebrates diversity throughout the campus. The University holds a [Bronze Athena SWAN award](#) which recognises the importance of support for women at all stages of their academic career.



We are proud to be a [Race Equality Charter Member](#). The Charter aims to improve the representation, progression and success of all minority ethnic staff and students within higher education and address issues of racism within higher education institutions (HEIs).



We are proud to be a Disability Confident Employer and have adopted a proactive approach to employing disabled people and to creating a more diverse workforce. We ensure that our recruitment processes are inclusive and accessible. We guarantee to offer an interview to all applicants who have declared themselves with a disability, provided they meet the essential criteria for a role. We proactively anticipate and provide reasonable adjustments and support existing employees who acquire a disability or long-term condition to thrive in the workplace.



We are a real living wage employer, and our Living Wage Employer Mark shows our commitment to paying our staff according to the cost of living.



We are proud supporters of the [City of Sanctuary movement](#) and delighted to be recognised as a University of Sanctuary. This national network brings together, university staff, lecturers, academics and students, who together work to make Higher Education institutions place of safety, solidarity and empowerment for people seeking sanctuary.

**As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.**