

**Job Description**

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| Job Title: | Knowledge Exchange Fellow in Floods and SuDS |
| Faculty/Professional Directorate: | EEI |
| Subject Group/Team: | EEI |
| Reporting to: | Stuart McLelland |
| Duration: | Fixed Term at 100% fte for 24 months |
| Job Family:  | Academic |
| Pay Band: | 7 |
| Benchmark Profile: | Research Band 7 |
| DBS Disclosure requirement: | NA |
| Vacancy Reference: | AE0238 |

**Details Specific to the Post**

**Background and Context**

The post will be based in the Energy and Environment Institute, which was established at the University of Hull in late 2016. The Institute vision is to be an internationally leading centre for research at the interfaces between energy and environmental resilience; with a focus on global sustainability challenges and delivering research that makes a difference. The Institute has three primary goals: to research and discover; to innovate and deliver impact; and to act as a regional anchor and beacon for world leading research and knowledge exchange.

The Knowledge Exchange Fellow in Floods and SuDS will contribute to thematic flood hazard and risk related work within the EEI, with a particular focus on Sustainable Drainage Systems as part of our SuDS*lab*UK initiative. Additionally, the post-holder will collaborate with colleagues in the Institute to support the design and delivery of teaching on our flagship the MSc in Flood Risk Management.

The ambition of our SuDS*lab*UK project is to increase water sustainability, improving flood and drought resilience and highlighting the importance of sustainable drainage and water flows in the urban environment (<https://www.hull.ac.uk/work-with-us/research/institutes/energy-and-environment-institute/our-work/sudslab-uk>). The project initially focused on establishing an instrumented network on the University’s campus to monitor hydrology and water quality as well as the impact of different SuDS and Green-Blue interventions. This monitoring programme enables research and teaching as a living laboratory, and is a pilot for wider initiatives and knowledge exchange with external collaborators. We now plan to expand the programme and the post holder will work with the Doncaster, Immingham and Grimsby (DIG) Surface Water Resilience Project to instrument and monitor water quality enhancements and flood risk reduction from several different arrays of SuDS interventions.

The MSc in Flood Risk Management is an innovative flagship new Masters programme which aims to deliver a broad education on managing flood risk with a focus on resilience to flooding and living with water. The post-holder will be expected to champion the new programme and to join the active and growing research community in the Energy and Environment Institute. Teaching delivered by the post holder is likely to consist of contributing to existing modules, skills-based teaching and dissertation supervision, as well as running tutorials and supporting the field courses.

### Specific Duties and Responsibilities of the post

The Knowledge Exchange Fellow will work closely with internal and external partners to exchange knowledge arising from research into sensor arrays and data networks for sustainable drainage systems, collaborating with colleagues in the EEI, Faculty of Science and Engineering and Lampada (University innovation incubator), as well as with our external partners from the Doncaster, Immingham Grimsby (DIG) Surface Water Resilience Project (which includes Local Authorities, Water Companies and the Environment Agency). Specific activities will include undertaking research; leading co-authored publications and presentations; working with colleagues and stakeholders to deliver KE activities as developed by the KE Fellow; and writing regular reports for stakeholders and other policy briefs.

In addition, the post holder will collaborate with colleagues in the Energy and Environment Institute to deliver teaching on the MSc in Flood Risk Management. Teaching is likely to consist of contributions to one or more existing modules, skills-based teaching and dissertation supervision, as well as running tutorials and supporting field courses.

Having secured significant funding from DEFRA, the DIG partners are building extensive SuDS in Doncaster, Immingham and Grimsby. The post will support the deployment, optimisation and utilisation of networked instrumentation into these SuDS which will monitor and evaluate their water management performance. The post will also support analysis, interpretation and presentation of data generated by the sensor networks, including for DIG stakeholders as well as technical and lay audiences. The post holder will also work with schools and communities to engage local residents in water management issues and flood risk management.

It is anticipated that the person appointed to this post will have knowledge and understanding of Sustainable Drainage Systems; experience of field or laboratory measurements/instrumentation; data analysis skills required to interpret large data sets; working as part of a team and liaising with external partners; of engaging with policy makers and/or external stakeholders; and designing and delivering research-led and skills-based teaching at either UG or PG level. The project will offer excellent career development opportunities including managing significant elements of a work package, speaking at international academic conferences and leading and co-authoring publications. The post holder will coordinate sensor deployment, report outputs to external partners, as well as contribute to the project’s website and social media profile. In addition, the post holder will gain experience of programme development, delivery and review of Masters-level teaching, and will be encouraged to complete the relevant HEA qualification.

The KE Fellow will be managed by Dr Stuart McLelland to deliver the KE project in collaboration with the DIG partnership and will also work with the teaching team to contribute to the MSc in Flood Risk Management. The postholder will devise, organise and manage knowledge exchange activity, engaging proactively with partners, businesses, stakeholders and communities to communicate project aims, progress and outcomes. The post holder will be required to present progress on a monthly basis and to write regular progress reports. They may be required to travel to conduct fieldwork or to external organisations to attend meetings/ conferences/workshops relating to the project.

**GENERIC JOB DESCRIPTION**

The job duties and responsibilities listed below are intended to describe the general nature of the role. The duties and responsibilities and the balance between the elements in the role may change or vary over time depending on the specific needs at a specific point in time or due to changing needs in the department. Candidates should note that there may not be an immediate requirement to carry out all the activities listed below.

### Overall Purpose of the Role

The researcher at this level will be:

* An experienced and professional researcher and will be a subject specialist, drawing upon knowledge gained from postgraduate research and/or working within a Research Band 6 role.
* Associated with a particular project (or projects) and will contribute ideas, and/or enhancement of techniques or methodologies and be expected to take significant initiatives in their work and consult with the Principal Investigator over the details of the project. They will work under supervision and receive academic, pastoral support and guidance which may include specific training, career opportunities and mentoring.

They may contribute to the Department’s teaching, through supervision of projects, overseeing practical classes, or taking small group tutorial classes.

The main focus of the work will involve conducting individual and collaborative research projects under the general guidance of a senior academic or Principal Investigator using new research techniques and methods, analysing and interpreting data and writing up research for publication.

**Main Work Activities**

1. Conduct individual and collaborative research projects to include:
* Using expertise to carry out projects they are working on.
* Contribute to the preparing proposals and applications for external bodies, e.g. for funding and contractual purposes with appropriate support or contribute to the writing of collective bids.
* Use new research techniques and methods.
* Analyse and interpret research data.
* Write up research work of the project and its dissemination through seminar and conferences presentations and publications.
1. Responsible for the management of projects to include:
* Plan and manage own research activity in collaboration with others.
* Manage administrative activities with guidance if required.
* Plan and monitor the work of the project or projects if applicable.
1. Assist with teaching and learning support in own area of study to include:
* Assist in the development of student research skills.
* Assess student knowledge and supervision of projects.
* Supervise and guide final year students.
1. Develop and initiate collaborative working internally and externally to include:
* Build internal contacts and participate in internal networks for exchange of information and to form relationships for future collaboration and to progress their research.
* Develop links and join external networks to share information and identify future potential sources of funding.
* Work with colleagues on joint projects as required.
* Attend and contribute to relevant meetings.
1. Demonstrate evidence of own personal and professional development to include:
* Continually update knowledge and understanding in field or specialism.
* Appraisal, induction and performance reviews.
* Participate in training and development activity.
* Maintain links with professional institutions and other related bodies.
* Collaborate with academic colleagues on areas of shared research interest.

### Additionally the post holder will be required to:

* Fulfil the employees’ duties described in the University’s health and safety policies and co-operate with the health and safety arrangements in place within the department. May be required to undertake specific health and safety roles on request e.g. Display screen equipment assessor, departmental safety officer, fire warden etc.
* Show a commitment to diversity, equal opportunities and anti-discriminatory practices this includes undertaking mandatory equality and diversity training.
* Comply with University regulations, policies and procedures.

**PERSON SPECIFICATION – Research Band 7**

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| **Specification** | **Essential**  | **Desirable** | **Examples Measured by** |
| **Education and Training**Formal qualifications and relevant training | * A PhD in physical geography, environmental sciences, water engineering or a cognate field
* Familiarity with SuDS
* Experience with managing and analysing large datsets
 | * A minimum requirement to be at or working towards Associate Fellow level as represented within the UK Professional Standards Framework with the expectation of being at Fellow level within 2 years from commencement of the post
 | ApplicationInterview Other |
| **Work Experience**Ability to undertake duties of the post | **Evidence of:*** An emerging track record in an appropriate research field, including authoring academic publications and grant applications
* Preparation and delivery of presentations at conferences/workshops
* Knowledge and understanding of undergraduate and postgraduate teaching in Geography, Flood Risk Management, or a cognate discipline
* Experience of designing and delivering content-led and skills-based teaching at either UG or PG level
 | * Experience liaising with external project partners in delivering joint research or policy outputs
* Experience of working in an interdisciplinary or transdisciplinary context
* Experience designing and delivering public engagement activities and/or working with community groups
 | ApplicationInterview Other |
| **Skills and Knowledge**Includes abilities and intellect | **Evidence of:*** Experience monitoring and evaluating data and writing reports and summaries from data collected
* Experience engaging with policy makers and other external stakeholders
 | * Participation in networks that seek to promote research collaboration
* Effective management of resources
 | ApplicationInterview Other |
| **Personal Qualities**Includes any specific physical requirements of the post – (subject to the provisions of the Equality Act 2010) | * An expectation to positively contribute to University activities and initiatives which may include open days, graduation ceremonies, etc., and have a willingness to undertake administrative activities
* Evidence of working in an open and transparent way, providing information and communicating effectively with colleagues
* Evidence of Continuous Professional Development
* Strong Interest in working with others in a multi/inter-disciplinary environment
* An expectation to positively contribute to the project activities
* Strong organisational skills
 |  | ApplicationInterview Other |