



THE POST

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| College: | College of Engineering, Mathematics and Physical Sciences |
| Post: | Research Impact Fellow in Sustainable Drainage Systems (SWEEP) |
| Reference No: | S57786 |
| Grade: | F |
| HERA: | RFEL |
| Reporting To: | Professor Guangtao Fu |

The above part-time (0.5FTE) post is available on a fixed term basis from 1st October 2018 to 19th May 2020.

Job Description

The University of Exeter is leading an exciting new project in partnership with Plymouth University and Plymouth Marine Laboratory, the South West Partnership for Environment and Economic Prosperity (SWEEP) funded by the Natural Environment Research Council (NERC). SWEEP Impact Fellows will have a unique opportunity to develop research facing skills within a leading research intensive University, whilst also working directly with businesses, policy makers and community groups to deliver impact and real world change. SWEEP is seeking to recruit the research leaders of tomorrow, who are passionate about delivering impact from research.

As a SWEEP Impact Fellow at the University of Exeter, you will be expected to work closely with Pell-Frischmann and several other stakeholders to deliver impact project entitled "Assessment of potential for large scale implementation of sustainable drainage systems (SuDS) in the South West". Increasing population, urbanisation and climate change are putting additional pressure on existing sewer infrastructure by reducing their capacity to manage surface water runoff hence increasing the risk of flooding and pollution of the environment. These issues are of particular importance in the South West region which has most of UK's natural capital. The concept behind the SuDS is to mimic natural systems to drain away surface water run-off through collection, storage and cleaning before releasing it back into the environment. The overall aim of the project is to **develop an innovative, planning methodology and a tool for strategic level prioritisation of areas for SuDS implementation.**

Main purpose of the job:

The key project activities include:

1. Detailed assessment of the existing SWAT methodology and the tool developed by Pell-Frischmann, accompanied by related literature review;
2. Development of an improved surface water management methodology;
3. Development of an improved software tool based on the developed methodology, including a new, user friendly Graphical User Interface;
4. Collection of data (open and proprietary) and testing, validation and demonstration of the methodology and the tool on selected case studies;
5. Assessment of the potential for large scale implementation of SuDS in the South West with associated costs and benefits.

This project will allow you: to be part of a team of SWEEP Impact Fellows at the University of Exeter; to learn new things related to the Sustainable Drainage Systems; to conduct applied research to translate academic science into environmental, economic and social benefits to the South West of the UK; to work with local businesses, authorities, policymakers and landowners with the decisions they

Main duties and accountabilities:

1. To undertake research as appropriate to the field of study. The responsibilities may include all or some of the following:
 - Acting as principal investigator on research projects;
 - Developing research objectives, projects and proposals;
 - Conducting individual or collaborative research projects;
 - Identifying sources of funding and contributing to the process of securing funds;
 - Extending, transforming and applying knowledge acquired from scholarship to research and appropriate external activities;
 - Writing or contributing to publications or disseminating research findings using media appropriate to the discipline;
 - Making presentations at conferences or exhibiting work in other appropriate events;
 - Assessing, interpreting and evaluating outcomes of research;
 - Developing new concepts and ideas to extend intellectual understanding;
 - Resolving problems of meeting research objectives and deadlines;
 - Developing ideas for generating income and promoting research area;
 - Developing ideas for application of research outcomes;
 - Deciding on /following research programmes and methodologies, often in collaboration with colleagues and sometimes subject to the approval of the head of the research programme on fundamental issues.
2. To contribute to teaching and learning programmes in the School and to supervise postgraduate research students.
3. To act as research team leader including:
 - Mentoring colleagues with less experience and advising on their professional development;
 - Coaching and supporting colleagues in developing their research techniques;
 - Supervising the work of others, for example in research teams or projects;
 - Developing productive working relationships with other members of staff;
 - Co-ordinating the work of colleagues to ensure equitable access to resources and facilities;
 - Dealing with standard problems and help colleagues to resolve their concerns about progress in research.
4. To routinely communicate complex and conceptual ideas to those with limited knowledge as well as to peers using high level skills and a range of media and to present the results of scientific research to sponsors and at conferences.
5. As determined by the nature of the project and at the direction of the PI, to plan, co-ordinate and implement research programme activity including:
 - Managing the use of research resources and ensuring that effective use is made of them;
 - Monitoring and reporting on the use of research budgets;
 - Helping to plan and implement commercial and consultancy activities;
 - Where appropriate, to plan and manage own consultancy assignments.

This job description summarises the main duties and accountabilities of the post and is not comprehensive: the post-holder may be required to undertake other duties of similar level and responsibility. Please visit the Human Resources website to view the Research Fellow role profiles.

Person Specification

| Competency | Essential | Desirable |
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| Attainments/Qualifications | PhD or equivalent qualification/experience in a related field of study. | Be a nationally recognised authority in the subject area. |
| Skills and Understanding | Possess sufficient specialist knowledge in the discipline to | |

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| | develop/follow research programmes and methodologies. Record of research output in high quality publications. | |
| Prior Experience | Experience of managing research projects and research teams. | Experience of undergraduate /postgraduate teaching and supervision. Experience of acting as principal investigator on research projects. |
| Behavioural Characteristics | Excellent written and verbal communication skills. Able to communicate complex and conceptual ideas to a range of groups. Evidence of the ability to collaborate actively within the Institution and externally to complete research projects and advance thinking. Able to participate in and develop external networks. Able to balance the pressures of research, administrative demands and competing deadlines. | Able to identify sources of funding, generate income, obtain consultancy projects, or build relationships for future activities. |
| Circumstances | | |

Informal Enquiries

Before submitting an application you may wish to discuss the post further by contacting Prof Guangtao Fu, Associate Professor of Water Infrastructure System at the University of Exeter, telephone (01392 723692) or email g.fu@exeter.ac.uk

Terms & Conditions

Our Terms and Conditions of Employment can be viewed [here](#).

Further Information

Please see our [website](#) for further information on working at the University of Exeter.