THE POST

College:	**College of Life and Environmental Sciences**
Post:	**Postdoctoral Research Associate**
Reference No:	**P67529**
Grade:	**E**
HERA:	**ARF**
Reporting To:	**Principal Investigator: Professor Tim Quine**
Responsible For:	**N/A**

The above full-time post is available immediately in the College of Life and Environmental Sciences, for 12 months. This is appointment is in collaboration with Peking University, China. The postholder will first be appointed by the University of Exeter for 12 months, and subsequently employed by Peking University for 12 months. For the period of employment at PKU, the successful candidate is expected to receive a salary of 120,000 Yuan plus accommodation costs.

Job Description

Main purpose of the job:

The successful candidate will be employed on the Natural Environment Research Council (NERC)-funded project, *MIDST-CZ: Maximising Impact by Decision Support Tools for sustainable soil and water through UK-China Critical Zone science*'. The postholder will be responsible for DST modelling with a focus on:

- Yield prediction as a function of environmental parameters and fertiliser inputs;
- Land Use modelling as a function of policy (which influences most variables), yield, ownership, food consumption and demand, fertiliser (price & availability)
- Impact modelling on: Carbon stocks; Water Quality; Food and Health

The postholder will work in both the UK and in China, so good language ability (written and spoken) in English will be important. The postholder should have analytical skills in GIS, Remote Sensing and Statistics. Experience of finding and organising databases will be very useful, and experience of environmental modelling will be valuable.

Main duties and accountabilities:

1. To undertake research as appropriate to the field of study including:

- Being responsible for DST modelling with a focus on:
    - Yield prediction as a function of environmental parameters and fertiliser inputs;
    - Land Use modelling as a function of policy (which influences most variables), yield, ownership, food consumption and demand, fertiliser (price & availability)
    - Impact modelling on: Carbon stocks; Water Quality; Food and Health
- Writing up research work for publication;
- Developing research objectives and proposals for own or joint research;
- Making presentations at national and international conferences and similar events;
- Dealing with problems which may affect the achievement of research objectives and deadlines;
- Analysing and interpreting the results of own research and generating original ideas based on outcomes;

2. May be required to contribute to teaching and to be involved in the assessment of student knowledge including assisting in the supervision of student projects and in the development of student research skills.

- Using new research techniques and methods;
- Using initiative and creativity to identify areas for research, developing new research methods and extending the research portfolio;
- Using creativity to analyse and interpret research data and draw conclusions on the outcomes.

3. To work in collaboration with colleagues as appropriate to the field of study including:

- Contributing to collaborative decision making within the research group;
- Contributing to the production of collaborative research reports and publications.
- Preparing papers and presenting information on research progress and outcomes to bodies supervising research, e.g. steering groups.

4. To communicate complex information, orally, in writing and electronically.

5. To prepare proposals and applications to external bodies, e.g. for funding and contractual purposes

6. To contribute to the planning of research projects.

7. To use research resources, laboratories and workshops as appropriate and to take responsibility for reducing hazards and for the health and safety of others. Where appropriate, will also be responsible for conducting risk assessments.

8. To monitor research budgets as appropriate.

9. To engage in continuous professional development and to be responsible for continually updating knowledge and understanding in field of study or specialism and for developing skills.

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
Attainments/Qualifications	PhD (OPTIONAL or nearing completion) or equivalent qualification/experience in a related field of study.	
Skills and Understanding	Sufficient knowledge in the discipline and of research methods and techniques to work within established research programmes. Strong language ability (written and spoken) in both English and Mandarin. Analytical skills in GIS, Remote Sensing and Statistics.	Evidence of research activity and published research.
Prior Experience	Experience of finding and organising databases. Experience of environmental modelling. Understanding of health and safety legislation	Experience of undergraduate teaching

Behavioural Characteristics	Excellent written and verbal communication skills. Able to communicate material of a specialist or highly technical nature. Able to manage research and administrative activities and to balance the competing pressures of research and administrative demands and deadlines. Able to liaise with colleagues and students. Able to build contacts and participate in internal and external networks for the exchange of information and collaboration. Able to identify potential sources of funding. Actively participate as a member of a research team. Engage in continuous professional development. Understand equal opportunity issues as they may impact on areas of research content. Where appropriate to the role, willingness to undergo training in order to conduct risk assessments	
Circumstances	Right to work in in the UK and China. Willing to work flexibly to achieve project demands	

Informal Enquiries

Before submitting an application you may wish to discuss the post further by contacting Professor Tim Quine, Principle Investigator and Deputy Vice Chancellor (Education), email t.a.quine@exeter.ac.uk (PA: Zoe Humble, 01392 723004).

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.