**NERC Centre for Ecology and Hydrology**

**Research Associate – Environmental Chemistry Modeller**

**Based in Lancaster, U.K.**

**Band 6 – Salary £28,200 p.a.**

**Fixed term appointment for 3 years**

The NERC Research Associates' Programme is an initiative which is intended to offer individuals the opportunity to gain practical experience of working within a Research Institute, whilst acquiring specialist and wider skills that will be valuable in a range of careers.

The programme is aimed particularly at those who have recently completed postgraduate studies, but is open to individuals from other backgrounds and of all ages. Individuals will work on highly topical research projects, both important for future research within the environmental research community and appropriate to their backgrounds. Research Associates are given specific, measurable objectives which will be intended to develop their skills as a researcher and to demonstrate their suitability for a research career.

**Description of work area**

Development and application of models of environmental chemical speciation, fate and risk assessment.

**Description of specific work to be undertaken and skills to be gained**

We are seeking a suitable applicant for an exciting opportunity to work on the development and application of models of environmental chemical speciation, fate, bioavailability and risk. The post-holder will be appointed as a CEH Research Associate and thereby undertake extensive training in mathematical modelling approaches for chemicals, the application of modelling to real–world scenarios, and the effective communication of outcomes to relevant policymakers. Such skills are amongst the 15 ‘Most Wanted’ skills identified by NERC in its 2012 Skills Review and will be a key asset in helping the applicant develop their future scientific career. The post holder will also contribute to the development and application of speciation, fate, bioavailability and risk models for manufactured nanoparticles. The post will be based within the Environmental Contaminants Group at CEH’s Lancaster site, located within the Lancaster Environment Centre.

The post holder will develop skills in software development and application for chemical speciation, fate and risk assessment in the environment, and in the effective communication of modelling outcomes to policymakers. They will also develop awareness of the broader research context of their work, by interacting with experimental and field scientists (chemists and ecotoxicologists) across the CEH sites within a number of ongoing projects centered on hazard and risk assessment of manufactured nanoparticles.

**Skills and qualifications required on appointment**

• A second degree (e.g. MSc.) in an IT-heavy subject (e.g. Scientific Computation, Computer Science), *or* a research degree (M.Phil, Ph.D.) in a quantitative environmental science with a strong element of modelling, ideally including model development;

* A degree (at least 2.1) in a scientific subject requiring numeracy and/or chemical knowledge (e.g. Chemistry, Environmental Engineering, Chemical Engineering), ideally with some element or modules of computing;

• IT and computer programming skills, preferably in FORTRAN (training can be provided);

• An aptitude/interest in environmental model development and application;

• A willingness to gain knowledge of the wider research and policy context of their work;

• Excellent communication and team skills;

• The potential to develop scientific leadership skills.

**Training and skills to be gained in summary**

At the end of the 3-year training programme, the Research Associate will have gained in-depth training in the development and application of cutting-edge computer models for chemical speciation, fate, bioavailability and risk in the environment, and will have developed an understanding of the broader research context and policy implications of their work. They will have had the opportunity to make significant contributions to a number of key projects delivering CEH science objectives in the area of chemical pollution and environmental risk.

**How to apply**

Apply at: <http://www.topcareer.jobs/Vacancy/irc236649_6812.aspx>. Closing date: 2nd January

For more information and to discuss this vacancy, please email Stephen Lofts (stlo@ceh.ac.uk).