

OPPORTUNITY FOR NERC POLICY PLACEMENT FELLOWSHIP IN DEFRA

Technical lead for Defra's Atmospheric Modelling

The Appointment

Defra is looking for a scientist with the appropriate expertise to provide a technical lead for air quality modelling as a temporary fellowship. The Atmosphere and Local Environment (ALE) Programme in Defra has recently undertaken a review of its atmospheric modelling portfolio lead by an independent steering group. Building on the recommendations from the review, Defra is now developing a strategy for atmospheric modelling. The strategy will ensure future evidence needs for policy development are met through activities which will need implementing and managing in the short, medium and long term.

The Natural Environment Research Council (NERC) and Defra welcome applications for a temporary specialist fellow to work with Defra on its Atmosphere and Local Environment Programme (ALE), based in London (Ergon House, 17 Smith Square, SW1) for a period of eighteen months on a part time (25 -30%) basis. The post is being offered as part of the NERC policy placement fellowship scheme aimed at supporting the science to policy processes between Government Departments and NERC. The post-holder will interact on a regular basis with NERC science managers and theme leaders for Environment Pollution and Human Health theme, the National Centre for Atmospheric Science (NCAS) and the broader atmospheric modelling research community supported by NERC, and with the knowledge exchange team.

Closing date for applications: Wednesday 08th February 2012

Interview date: Wednesday 29th February 2012

The application form and guidance notes can be found on the NERC fellowship placement webpage (<http://www.nerc.ac.uk/using/publicsector/fellowship.asp>)

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Such placements have proved most valuable, significantly enhancing links between NERC science and science evidence and policy teams in government, enabling improved science evidence for UK policy. The value to post-holders has also been high. Previous placement fellows have benefited from developing a clearer understanding of how government works in delivering evidence-based policy, an understanding of handling the day-to-day pressures of delivering directed science and of communicating with senior officials and ministers, whilst developing strategies for delivering evidence for policymaking in the longer term.

The Fellow will remain employed by their present employer and arrangements will be made to cover travel and subsistence expenses on a case-by-case basis.

Job Purpose and Description

The Defra Atmosphere and Local Environment (ALE) Programme work plan includes assessing, controlling and managing air pollution and its impacts across the UK, in addition to influencing international agreements addressing atmospheric pollution. ALE runs an extensive science and evidence programme, in which air quality modelling plays an important role in developing and evaluating air quality policy.

Over the forthcoming year, Defra will produce an atmospheric modelling strategy to provide direction with regards to current and future research to ensure future evidence needs for policy development are met. The ALE Programme is looking for a scientist with the appropriate expertise to provide a technical lead for Defra's air quality modelling.

Role description:

Technical lead for Defra on Air Quality Modelling

- Provide a technical lead for Defra's air quality modelling— assist with management of outputs from projects in terms of managing technical deliverables and outputs and utilising them to meet the needs of policy.
- Assist with developing a strategic direction for Defra's modelling.
- Assist with implementation of a modelling strategy for Defra.
- Create links across Defra to promote the profile of air quality/enable access to our data where it could be of use to other evidence managers or policy makers.
- Create links with the atmospheric modelling and research community.

Provide technical support to an external Modelling Advisory Group (MAG) who will provide Defra with peer review and assurance around future direction of Defra's atmospheric modelling.

- Support setting up and managing the MAG
- Draft papers on modelling activities and issues related to the strategic direction of Defra modelling for the MAG.

Technical Lead for Model Intercomparison Exercise

- Managing Defra's modelling intercomparison exercise and undertaking analysis of results to maximise value to Defra.
- Working with external contractors to gather data, analyse data and produce outputs from model intercomparison exercise, feeding back to and liaising with participants.

Background

The over-arching purpose of Defra is to protect the environment for future generations, make our economy more environmentally sustainable, and improve our quality of life and well-being. Two priorities are to secure a healthy natural environment and to deal with environmental risks. As part of this remit, Defra's Atmosphere and Local Environment Programme works to control and manage air quality across the UK, including an extensive programme of atmospheric pollution science and research. This includes research into monitoring and modelling air pollution, the health impacts of pollutants, and how pollutants affect the natural environment. Defra and the Devolved Administrations use air quality models for assessing compliance with EU Directives and to inform negotiations on policy changes. Models provide a wider assessment of the state of air quality across the UK both in terms of airborne concentrations and potential human exposure and the deposition of acidifying and eutrophying pollutants. Currently Defra and the Devolved Administrations use a suite of models to assess a range of pollutants at different spatial scales, from local to hemispheric, to meet a number of requirements including feeding into negotiations on international agreements such as the EU's National Emissions Ceilings Directive, and the UNECE Convention on Long-Range Transboundary Air Pollution.

NERC funds world-class science in universities and research centres that increases knowledge and understanding of the natural world, through independent research and training in the environmental sciences. NERC's current strategy defines seven themes under which its science will be delivered: climate system, biodiversity, sustainable use of natural resources, earth system science, natural hazards, environment pollution and human health, and technologies. NERC interacts and works regularly with a wide range of stakeholders,

including policy-makers, to support the science to policy process and help develop appropriate ways to address environment issues.

Skills required

The successful applicant should ideally have a strong scientific and policy background with a broad understanding of science and knowledge of research activity sources. A strong interest in driving forward the research agenda to serve policy and operational needs is essential, as are a degree of lateral and creative thinking. The following skills are expected:

- Knowledge and research experience in a relevant field is essential
- An understanding of NERC and Defra remits.
- Good communication, networking and presentation skills.
- Ability to work strategically across disciplines and an appreciation of the policy and regulatory context of research.
- Good project management skills, and an ability to work independently as required.
- Leading and influencing – effective communication including providing strong leadership, engaging staff, delivery partners and wider stakeholders
- Collaboration – driving co-operation within and beyond Defra.
- Thinking with vision – being able to see the bigger picture beyond Defra (including UK, EU and global issues), setting agendas and driving strategic direction.
- Making things happen – being outcome focussed, able to prioritise and well organised.
- Delivering in partnership – building, maintaining and promoting effective partnerships, engaging and managing delivery partners effectively.

Essential specialist expertise

The scientist will have an understanding of technical aspects of air quality modelling, including practical expertise of undertaking modelling, and preferably have some experience of delivering government-commissioned research projects. The scientist should also have a good understanding of inputs and outputs to air quality modelling

Please Note: Any potential conflicts of interest with existing research partners should be minimised and clearly identified in all cases.