

Announcement of Opportunity: NERC / Satellite Applications Catapult Knowledge Exchange Fellow

Environmental Challenges & Urbanisation

Closing Date: 12th September 2017

Interview date: 4th October 2017 location Satellite Applications Catapult (Harwell, Nr Didcot, Oxfordshire, OX11 0QR)

The Natural Environment Research Council, in partnership with the Satellite Applications Catapult, is inviting Knowledge Exchange (KE) Fellowship proposals that address environmental issues and challenges faced by urban leaders, government organisations, planners or businesses, in towns and cities and how the use of satellite technology (Earth Observation, Positioning Navigation and Timing and Communications) can help.. The KE Fellow will work with both public and private sector organisations working in towns and city areas in the UK or in developing economies on the [OECD Development Assistance Committee \(DAC\) list](#).

The KE fellow will enable the Satellite Applications Catapult to accelerate access to UK environmental Science, data and expertise for uptake by a range of end-users, including (but not limited to) businesses and public bodies. The Fellow's core role will be to act as an ambassador for the NERC Community with the Catapult, identifying opportunities to pull through and link science within the NERC remit and information generated from satellites to address urban challenges.

The KE Fellow does not need to have a technical knowledge of satellites, the role is to work with the Satellite Applications Catapult to understand where satellite technology can be used, and where they can be enhanced by NERC funded science to address environmental issues and challenges in urban environments.

Applications are welcomed on a part time basis (between 50% and 80% FTE). Ideally the Fellowship will commence November 2017 with duration of two years. This KE Fellowship will be paid at 80% Full Economic Cost and there is a budget of £60k for salary costs and up to £8k for travel and subsistence per annum. Any career stage and salary level may apply with the expectations of achievement adjusted accordingly.

Background

By 2050, two-thirds of people across the world will live in towns and cities – a major change from 1950 when two-thirds lived in rural areas. This shift to urbanisation presents a huge opportunity for environmental science and satellite-based solutions that can be used by both end-users and government organisations to manage resources and for planning, navigation and security.

Both environmental science and information from satellites have a role to play in future cities for applications including urban planning, air quality monitoring, flood warning systems, remote healthcare services and enhanced traffic management and navigation. NERC and the Satellite

Applications Catapult have therefore identified an opportunity to develop collaborative activity to enhance the links between the communities to identify, test and potentially develop future solutions around urban challenges.

The Satellite Applications Catapult is an independent Research and Technology Organisation (RTO), which aims to “help businesses of all sizes realise the potential from space”. The Catapult helps organisations make use of and benefit from satellite technologies, and brings together multi-disciplinary teams to generate ideas and solutions in an open innovation environment.

Using its world-class facilities and expertise, businesses, researchers and end-users are able to work together to develop new satellite-based products, services and applications, translating ideas from concept to market.

The successful fellow will be expected to enhance the application of NERC environmental science, data and expertise. In addition, by working with technical experts and exploiting the facilities of the Satellite Applications Catapult, the KE fellow will assist in the development of innovative new products, processes and services that provide future solutions to challenges in urban environments in towns and cities.

Scope of the Fellowship

The successful Fellow will work with the Satellites Application Catapult and will engage closely with urban leaders, including but not limited to planners, public bodies, businesses and other research organisations to enable the uptake and integration of NERC remit science and expertise with satellite information to address key challenges in towns and cities.

The successful candidate will have excellent understanding of the urban environment and some of the associated environmental challenges. It would be advantageous to have an understanding of information from satellites and its potential application in the urban environment (however technical knowledge is not obligatory and can be provided by the catapult). The role will include:

- Engaging with key people and organisations involved in planning and decision making within towns and cities to understand the environmental questions and challenges they face and work through potential solutions;
- Engaging with the Satellite Applications Catapult to explore how environmental science, data and expertise can be applied or integrated into satellite-based products, services or applications relevant to towns and cities;
- Acting as an ambassador between the NERC community and the Catapult – developing new relationships between researchers, businesses, public bodies and other stakeholders;
- Synthesise and package research outputs, and provide briefings and reports, to help users and stakeholders to understand what NERC has to offer when considering the development of satellite based products, services and applications;
- The application of your expertise in relevant projects to address environmental challenges using NERC remit science and satellite applications;
- Capturing evidence from successful examples of applied environmental science and satellite applications for the generation of impact case studies;

- Ensuring that the NERC community are well represented and included at relevant externally facing workshops or stakeholder engagement activities; and
- Identify potential opportunities for future investment and where appropriate develop bids to support new ideas and innovations.

Reporting, management and governance requirements

The Fellow will work closely with the Satellite Applications Catapult, who will be responsible for guiding and shaping the nature of the work.

The KE Fellow will attend regular meetings with an assigned Senior Programme Manager (Innovation) in NERC Swindon Office. The fellow will be required to report annually via Researchfish.

In addition, the Satellite Applications Catapult KE Fellow will work alongside existing Satellite Applications Catapult Fellows, and Researchers in Residence to source and share information and good practice.

The Fellow will be expected to operate as part of a UK-wide, NERC Knowledge Exchange Fellow network and will participate in monitoring, training and networking activities, including:

- regular (quarterly) progress monitoring with contacts at both NERC and the Satellite Applications Catapult;
- attending network meetings with other KE fellows who are working on other NERC projects (for example Green Infrastructure and Natural Capital KE fellows) and other Satellite Applications Catapult Fellows.

Assessment criteria

The successful KE Fellow will demonstrate the following elements in their application:

- An ability to bring fresh insights to the Satellite Applications Catapult through their connections with NERC-funded research base and wider environmental science community;
- An awareness of relevant NERC-funded community across the UK and its potential for uptake in satellite applications;
- A demonstrated ability or desire to undertake translation activities related to environmental science, enabling access by a broad range of end-users including SMEs and others;
- Knowledge of the Satellite Applications Catapult strategic objectives;
- Preliminary ideas of the relevant environmental science, data, networks and names of key contacts for the development of a work programme that aims to address environmental questions and challenges in towns and cities, using satellite based solutions; and
- An understanding of the potential of satellite technology in urban environment environments is desirable but not essential.

Eligibility Criteria

This opportunity is open to applicants based in UK higher education institutions (HEIs), NERC research centres and independent research organisations (IROs) approved by NERC, providing that the science the work builds on was funded by NERC.

Private, public and third sector organisations or institutions are eligible as end users and partners in proposals.

Research Council Institutes and HEIs are not eligible as end-users.

Applications should fall within the NERC science remit and primarily have the approach of gaining impact from NERC funded research. A small element, up to around 20%, can be based on other funded research and be in other remits.

How to apply

Please read the 'Further guidance' document and the 'Jes guidance' supplied. Follow the route indicated for Directed fellowships or 80% FEC funding. Please do not hesitate to contact us if you have any queries.

Contact

For further information on the KE Fellowship Scheme or the application process:
Lynne Porter, lyn@nerc.ac.uk or innovation@nerc.ac.uk

For further information on the NERC/Satellite Applications Catapult opportunity:
Nafeesa Dadja, Nafeesa.Dajda@sa.catapult.org.uk