



UK GEOENERGY OBSERVATORIES PROJECT TRAINING OPPORTUNITIES: ACTIVITY 2 IDEAS WORKSHOP

Announcement of Opportunity

First issued on: 14 January

Reissued on 24 January

Full Proposals deadline: 17:00 GMT on 5 February 2019

1. Summary

The Natural Environment Research Council (NERC) invites applications from PhD students and Early Career Researchers (ECRs¹) to participate in an ideas workshop with experienced academics and innovators, which will help generate novel research and innovation ideas that extend the reach and impact of UKGEOS.

Following a light-touch open competition application process, up to 24 PhD students/ ECRs will be selected to participate in a one-day workshop, which will take place at the National Railway Museum in York on 27 February 2019 between 10.00-16.30 (registration from 09.30; indicative timing).

Funding is available to reimburse eligible travel and subsistence costs (exceptional costs e.g. unarranged/ additional child care will be considered) associated with workshop attendance. Successful applicants will be informed of further details and agenda of the workshop when they become available.

2. Background

Geological resources are vital for society. In addition to providing us with sources of energy, they provide the water we drink and the raw materials we need to build infrastructure that we often take for granted, to manufacture the goods that we buy, and to grow the crops that we eat². As we move into the post-fossil fuel era, the requirement for geological resources will become even more important, providing the raw materials needed to enable us to make the transition at the scale that is required.

¹ Defined as having up to a maximum of eight years of full-time equivalent post-doctoral research experience from PhD certificate date to the Full Proposals deadline.

² In the UK, geological resources other than fuels and water directly support around 12% of the country's GDP.

Exploitation of geological resources can only be carried out with public consent. As novel resources come on stream³, it is essential that all stakeholders including those who regulate land use and resource extraction have improved understanding of the subsurface in order to support effective decision-making.

In this context, the NERC UK Geoenery Observatories (UKGEOS) project aims to provide a world-leading observatory of the subsurface environment, and how it responds to human activities. The UKGEOS project will establish two new facilities (in Glasgow and, subject to obtaining planning consent, in Cheshire) that will help to deliver world-leading research into the subsurface environment. The knowledge generated will contribute to the responsible development of new energy technologies both in the UK and internationally, as well as furthering our understanding of subsurface processes.

The UKGEOS project will stimulate research on underground energy technologies that will answer vital questions about how they affect the environment through:

- Independent monitoring and observation - answering questions on how subsurface energy technologies interact with the environment.
- High-quality, scientific evidence - answering questions on new and established energy supply and storage technology, increasing efficiency and environmental sustainability.

The British Geological Survey (BGS) is delivering the research infrastructure on behalf of NERC and the academic community and will operate the facilities over their 15-year lifetime. Further information on UKGEOS is available on the [BGS website](#).

3. Scope

3.1 Programme objectives

The UKGEOS training opportunities aim to achieve the following objectives:

- Raise the profile of the UKGEOS project by broadening participation amongst the NERC research community (and wider), and stimulating research engagement and innovation relating to the newly created assets.
- Provide environmental scientists with the skills required to maximise the UKGEOS investment, and upskill the research community for long-term benefit.

The UKGEOS training opportunities will be delivered through three activities:

1. Activity 1: Site visits
2. Activity 2: Ideas workshop
3. Activity 3: Research internships

Activity 2 will stimulate ideas for future research using the UKGEOS facilities from PhD students and ECRs. Such ideas could be related to science that might not otherwise be possible, or focussed on innovation that ultimately has a commercial goal.

³ For example, Sirius Minerals' polyhalite mine in Yorkshire is a £2.5billion investment designed to produce 20 million tonnes/year for 100 years.

Participants will gain an up-to-date insight into what the UKGEOS facilities offer, and what funding routes are available to progress their ideas. The workshop will provide opportunities for participants to network and build connections that enable future research collaborations. Specific training opportunities at the workshop will cover project design and provide an introduction to commercialisation of ideas originating from the university sector, including capturing the impact of research.

The full agenda will be confirmed at a later date and published on the NERC website. The provisional programme is provided below (details are subject to confirmation):

- Background to the project – why the subsurface is important
- The UK Geoenergy Observatories in the global context
- Practicalities: design of the Observatories, access, capabilities and limitations
- Networking break
- Facilitated group-based breakout 1 – what are the pressing research questions that participants want to address using UKGEOS?
- Networking lunch
- Funding: routes to research and innovation funding in the present landscape; links with industry
- Facilitated group-based breakout 2 – how do the ideas map onto the funding routes that are available? What is a convincing project business plan? How can you take this forward into a proposal?
- Closing plenary

Expected training outcomes include:

- Project planning – articulation of ideas and concepts for non-specialist experts
- Project planning – design of a business plan for a project, identifying resources and their changing use during a multi-year project
- Peer review – recognising the need to listen to those with different perspectives and backgrounds, and how to write to be inclusive

4. Programme requirements

4.1 Programme funding

Eligible travel and subsistence costs will be reimbursed at 100% of the actual costs up to £400 per applicant (exceptional costs e.g. unarranged/additional child care will be considered). NERC anticipate funding up to 24 PhD students and/or ECRs.

4.2 Implementation and delivery

The full day workshop will take place at the National Railway Museum in York on 27 February 2019 between 10.00-16.30 (registration from 09.30; indicative timing). Successful applicants will be informed of further details and agenda for the workshop when they become available.

5. Application process

5.1 How to apply

Closing Date: 17:00 GMT on 5 February 2019

Applicants should email the completed [application form](#) to ukgeos@nerc.ukri.org by the closing date of Tuesday 5 February 2019 at 17:00 GMT. It will not be possible to submit to the call after this time.

5.2 Eligibility

The opportunity is open to PhD students and Early Career Researchers currently working within [NERC's remit](#) at approved UK Higher Education Institutions (HEIs), approved Research Council Institutes (RCIs) or approved Independent Research Organisations (IROs). Full details of [approved RCIs and IROs](#) can be found on the UKRI website.

ECRs are defined as having up to a maximum of eight years of full-time equivalent post-doctoral research experience from PhD certificate date to the closing date (specified in section 5.1). The eight-year window is based on full-time working. Where applicants have worked part-time or had career breaks, the window would be extended accordingly.

For further questions regarding eligibility, please contact ukgeos@nerc.ukri.org

6. Selection Process

Applications will be considered by a selection panel, which will comprise members of the UKGEOS Science Advisory Group, BGS staff involved in delivering the UKGEOS facilities, and a representative from NERC Head Office who will also chair the panel. Conflicts of interest in assessment will be managed in line with normal NERC policies. The panel will consider the applications according to the following criteria:

- Relevance of applicant's current work to attendance at the workshop
- Benefit of workshop attendance to applicant's career, personal development and training
- Balance of/equal representation of institutions among applicants

NERC will use the recommendations of the selection panel along with the overall call requirements and the available budget in making its final decision. Feedback will not be provided to applicants. All applicants will be notified of the outcome of their application to join the workshop as soon as possible following the meeting of the selection panel, and certainly by 14th February 2019.

7. Timetable

- Announcement published: 14 January 2019
- Deadline for submission of application: 5 February 2019
- Selection panel meets: second week of February
- Applicants notified: by 14 February 2019
- Workshop: 27 February 2019

8. Contact

For general and application enquiries:
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