

UK GEOENERGY OBSERVATORIES TRAINING OPPORTUNITIES: ACTIVITY 1 SITE VISITS

Announcement of Opportunity

Issued on: 12 March 2019

Full Proposals deadline: 17:00 on 29 April 2019

1. Summary

The Natural Environment Research Council (NERC) invites applications from PhD students and Early Career Researchers (ECRs) to take part in visits to the UK Geoenergy Observatories (UKGEOS) Glasgow field site during phase 1 of the drilling process.

Following a light-touch open competition application process, up to twelve PhD students/ ECRs will visit the drilling rigs and associated infrastructure.

Funding is available to reimburse eligible travel and subsistence costs (exceptional costs e.g. unarranged/ additional child care will be considered) associated with these visits. Prospective applicants should note the site visit will take place sometime between June and mid November 2019, with dates to be determined and finalised in line with the confirmation of borehole drilling plans. Successful applicants will be informed of further details of the visit 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 eat¹. 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.

Exploitation of geological resources can only be carried out with public consent. As novel resources come on stream², 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 Geoenergy Observatories (UKGEOS) project aims to provide a world-leading observatory of the subsurface environment, and how it responds to human

¹ In the UK, geological resources other than fuels and water directly support around 12% of the country's GDP.

² For example, Sirius Minerals' polyhalite mine in Yorkshire is a £2.5 billion investment designed to produce 20 million tonnes/year for 100 years.

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. The UKGEOS Glasgow site will study the shallow geothermal environment with a focus on geothermal energy from mine water. Further information on UKGEOS and the Glasgow site are 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 and Earth 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, which was held in York on 27 February 2019
3. Activity 3: Research internships

This announcement of opportunity is for Activity 1, which will enable PhD students and ECRs who might not otherwise have the opportunity to access the UKGEOS facilities to learn from and observe the drilling process and/or early borehole testing activities at the field site.

The visits to the Glasgow site will take place over one day, likely between June and mid November 2019 in line with confirmation of the drilling phases at the field site, and will include a briefing on the capabilities of UKGEOS and associated research opportunities. Details for a similar opportunity to visit the proposed UKGEOS Cheshire field site will be announced in due course, subject to obtaining planning consent.

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 twelve PhD students and/or ECRs to visit the Glasgow site.

4.2 Implementation and delivery

The British Geological Survey (BGS) is responsible for delivering the site visits, including organising logistics and liaising with the contractors on site access, health and safety. Please note the field sites are active construction sites, and that all visits will be arranged in consultation with the principal contractor. Applicants may express preferences for dates of site visits (and/or dates that they will be unavailable) but it is not possible to guarantee the preferred dates will be available.

5. Application process

5.1 How to apply

Closing Date: 17:00 on 29 April 2019

Applicants should complete the [online application form](#) by the closing date of 29 April 2019. 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

Prospective applicants should note the site visit will take place sometime between June and mid November 2019 and dates may be finalised at short notice. Successful applicants will be informed of further details of the visit when they become available.

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 Glasgow facility, and a representative from NERC Head Office who will also chair the panel. Conflicts of interest in selection 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 the site visit
- Benefit of site visit to applicant's career, personal development and training
- Diversity of applicants

- Balance of representation of institutions among applicants
- Applicant's ability to access the site by any other means

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 as soon as possible following the meeting of the selection panel, and by 23 May 2019 at the latest.

7. Timetable

- Announcement published: 12 March 2019
- Deadline for submission of application: 29 April 2019
- Selection panel meets: early May 2019
- Application notified: by 23 May 2019
- Site visits commence: June-mid November 2019

8. Contact

For general and application enquiries:

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For Glasgow site specific enquiries (please state you are enquiring about the site visit training opportunity):

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