British Geological Survey

Fellowship Summary

The training programme will build on the experience of hosting 16+ fellows since 2012.

Firstly, the primary aim is to provide experience and training in modern geochemistry laboratories, alongside learning systems of work (e.g. Quality Assurance, H&S, infrastructure maintenance). Further objectives may include experience in contributing or leading on scientific outputs, use or presentation of data for interpretation (e.g. statistics, QGIS - depending on interest).

The trainee will be led through a simplified Theory of Change process to evaluate their current laboratory capability and then how lessons learnt can be applied to their home situation for onward improvement and cascading of information to colleagues.

Depending on the candidate, we will provide flexibility for writing skills (papers, proposals, reports, standard operating procedures), experimental planning and grant proposals. Depending on the candidate, we will provide training in the use of R for statistics/GIS for the display and communication of data.

Weblink for Candidates

https://www.bgs.ac.uk/sciencefacilities/laboratories/geochemistry/igf/home.html

Eligibility

The candidate should have an environmental geochemistry background, but with a primary interest in laboratory activities. We have focussed on building a group across Africa with previous fellows to ensure onward benefit for fellows, but are open to other contributors. This Fellowship is not appropriate for the oil and gas sector.

Proposed Programme Dates

2 March 2026 to 29 May 2026

Proposed Activity

Arrival 1st March

2-20th March induction to BGS (HR, H&S), orientation within BGS campus. Review existing capabilities and training requirements to refine programme. Trainees can bring some of their own samples to undertake analytical chemistry training to provide relevant context, otherwise samples and data will be provided for them from on-going African projects.

3rd-6th

Introduction to systems of work, H&S, quality assurance, applicability to African context.

9-13th

Evaluation of existing datasets for onward training courses in GIS and Geostatistics. Training in data cleaning for onward management, assessment of IT skills.

13-20th

Modern lab methods using isotope tracers, elemental speciation for environmental pathways – benefit to understanding for collaboration internationally and for teaching purposes in home country. Selection of lab methods and why, fit to local resources.

23-26th March

Visit Uni. Plymouth - Communicating with stakeholders, study design, dissemination of information at community level to policy decision makers – practical examples for East Africa.

27th March

Respond to actions from meetings at Plymouth/home institute.

30-3rd April

Attendance annual industry symposia for instrument manufacturers - likely CEM Agilent in Glasgow/Birmingham tbc

2nd - catch-up notes, actions from symposia/ home institute. Return to tasks set from R statistics training.

6-10th April

Shadow laboratory techniques for soil/water analyses. Reinforcement of mechanisms required in labs for safe working, quality assurance, training and development requirements for staff and building mindset for preventative maintenance of equipment, planning for running costs.

13-17th April

Writing skills training, formats for public communication, scientific writing and policy briefs utilising learning material generated via a British Academy funded writing workshop series for African ECRs. Include grant writing, finding opportunities and write outline project proposal in readiness to respond to opportunities.

20-24th April

Evaluate quality assurance measures for laboratory methods, problem solving, readiness of data for publication in peer review or policy, appreciation for confidence and transparency in data communication and decision making. Connect into BGS L&D training schedule, timing to be flexible, but will be fee paying. Trainees will draw on BGS ISO accreditation experience

and capacity strengthening worldwide. Trainees to learn to incorporate, spot problems in others work and train in data integrity.

27th April–1st May

Follow-up training on data handling, geospatial (GIS) and R for statistics using example scenario and datasets for practical exercises – on the job training with support from specialists. Incorporation into reports, papers, policy briefs etc. Time for practice and guidance to further online support.

5-8th May

Further labs shadowing, reinforcement or missed techniques.

11-15th May

Scope follow-up funding for research and laboratory support (cost recovery) for discussion throughout, but set aside time for action plan for continuance of lessons learnt on return to home countries. Draw on Theory of Change practices.

18-22nd May

Finalise their own lab flow plan, visit to Uni. Nottingham.

25-29th May

Bank Holiday write CSCUK report and blog, spare days for close-out.

30th May

Fly home

Priority Theme

Science and technology for development