Job Title: Research Associate  
Grade: 7  
Salary: £34,804 - £40,322 per annum  
Department: School of Geography, Geology and the Environment  
Hours/Contract: Full time, fixed term contract for 18 months  
Reference: 1891

Role Purpose
To undertake research as part of the NERC-funded CuBES project (Copper Basin Exploration Science). A large component of this multi-institution project will be to collect passive and controlled source seismic data across the Copper Belt in Zambia to determine for the first time the large scale crustal structure of the region to enable the copper deposits to be interpreted in a geodynamic context. The researcher will lead the field deployment and acquisition of the seismic data, its processing and initial interpretation which will be written-up in collaboration in international journals with other members of the team. In particular, there will be close co-operation with colleagues at the University of Oxford both in the field in Zambia and in the UK on the acquisition and interpretation of the data.

Resources Managed
The data will be acquired using an array of passive seismic instruments on loan from SEIS-UK, part of the NERC’s geophysical equipment facility based at the University of Leicester. The researcher will manage the deployment and recovery of the equipment under the guidance of the PI.

Main Duties and Responsibilities

- Develop and conduct an original research programme involving acquisition of passive seismic data for the first experiment of its kind in Zambia. This will involve deployment of the seismic instruments, servicing and their recovery.
- Develop and conduct an original research programme investigating the structure of the crust beneath the Copper Belt in Zambia by processing and interpreting the data collected. This will involve but not be limited to calculating receiver functions to determine crustal thickness and average velocity structure. Interpretation of the data will be undertaken with colleagues at the University of Oxford who will be working on the geohistory of the basin.
- Undertake independent and collaborative research resulting in publications in international peer review journals and present the results at conferences.
- Liaise with academic colleagues at other Institutions involved with the CuBES project and attend project meetings.
- Other activities
- Participate in relevant professional activities including outreach.
- Participate in relevant staff development programmes.
- Ensure that all activities undertaken are in compliance with the ‘Research Code of Conduct’ and Policies of the University of Leicester.
- Ensure compliance with health and safety requirements in all aspects of work.

Internal and External Relationships

Reporting to the Project PI on progress and performance in relation to the responsibilities of the job holder.
## Job Summary

Working as a team member in the School of Geography, Geology and Environment. Have an active role in the University.

Collaborating effectively with academic colleagues at partner Institutions involved in the CuBES project to integrate the results of the research, contribute to success of the project and ensure publication of the highest quality scientific results.

### Planning and Organising

The post holder will be responsible for planning and organising their own work to meet contractual deadlines and deliver high quality results, supported by regular meetings with the project’s Principle Investigator.

### Qualifications, Knowledge and Experience

**Essential**

- A good honours degree in Geophysics, or Geology, or Earth Sciences or a similar discipline*
- A completed PhD or an equivalent amount of professional experience in passive/earthquake seismology*
- Experience in undertaking geophysical or geological fieldwork *
- Experience of publishing in peer-reviewed journals*

**Desirable**

- Experience of installing and operating networks of passive seismometers (in remote locations)*.
- Experience of calculating receiver functions*.
- Experience of public engagement in science.
- A track-record of working with partner organisations.

### Skills, Abilities and Competencies

**Essential**

- Strong research skills in seismology
- Ability to solve problems independently
- Effective oral and written* communication skills in English
- Good time management
- Excellent team working skills.

**Desirable**

- Skills in writing journal publications
- Ability to initiate, plan, organise, implement, and deliver programmes of work

*Criteria to be used in shortlisting candidates for interview

### Criminal Declaration

If you become an employee, you must inform your manager immediately, in writing, if you are the subject of any current or future police investigations/legal proceedings, which could result in a criminal offence, conviction, caution, bind-over or charges, or warnings.
## VITAL

The University encourages all staff to live our VITAL values which are:

**Valuing People, Innovators, Together, Accountable, Leaders.**

## Equality and Diversity

We believe that equality, diversity and inclusion is integral to a successful modern workplace. By developing and implementing policies and systems that challenge stereotypes across all aspects of our work, we have a culture that recognises and values the diverse contributions of our staff which benefits everyone. Our strong values of inclusivity and equality support our efforts to attract a diverse range of high quality staff and students, and identify our University as a progressive and innovative workplace that mainstreams equality, diversity and inclusion.