THE POST

College:	**College of Engineering, Mathematics and Physical Sciences** **http://emps.exeter.ac.uk** **Environment and Sustainability Institute** **http://www.exeter.ac.uk/esi**
Post:	**Lecturer (Education and Research) in Applied Geomicrobiology**
Reference No:	**P42957**
Grade:	**F**
Reporting To:	**Pro Vice Chancellor (PVC), Dean of College and ESI Director**

Job Description

This post is part of the Environment and Sustainability Institute (ESI; http://www.exeter.ac.uk/esi) and is affiliated to the Camborne School of Mines (CSM; http://emps.exeter.ac.uk/csm). The ESI leads cutting-edge research into solutions to problems of environmental change from local to global scale. It was initially funded with a £22.9 million investment from the European Regional Development Fund and £6.6 million from the South West of England Regional Development Agency with a goal of improving the economic and environmental future of the South West region. Key themes within the ESI include the sustainable use of materials and resources; biodiversity and ecosystem services, environmental stewardship and environmental health.

The ESI and the CSM are continuing their expansion as world-class centres for research, teaching and training that provide a stimulating and inspirational environment which brings out the very best in our staff and students. We are a strong and strategically smart academic community, combining ground-breaking studies and the pursuit of knowledge with high-quality teaching, reinforced by state-of-the-art facilities, and excellent academic support. The current advertised position will be recruited into our University Penryn campus in Cornwall, near beautiful Falmouth.

CSM Research at our Cornwall Campus ranges from fundamental studies of geological systems to applied research related to the exploration and mining of ore deposits, and environmental management of wastes from mining and other industrial activities. Together with the ESI, we actively foster interdisciplinary research across the natural, engineering, medical and social sciences, and humanities, across the University, and beyond. We bridge fundamental and applied, focused and multi-disciplinary research, attracting funding from NERC, EPSRC, STFC, the EU and a wide range of industrial, governmental and NGO organisations.

CSM provides an inspirational, demanding and ultimately rewarding learning experience, teaching undergraduates and MSc students in broad, yet deep, Geology, Applied Geology, and Mining and Geotechnical Engineering degree programmes. We have a vibrant postgraduate research community comprised of over 40 research students who, together with early career researchers, and our professional and technical service colleagues, makes our community a diverse and considerate environment in which individuals can realise their full potential.

The ESI, CSM and the University have exceptional resources, including a world-class chemical and mineralogical facility (with QEMSCAN, electron microprobes and ICP-MS), comprehensive mineral engineering and surveying equipment, geomicrobiology laboratories, one of the largest and most diverse aquatic facilities in Europe (https://www.exeter.ac.uk/research/marine/facilities/), bespoke plant and invertebrate facilities, outstanding imaging capabilities (including cryo-electron, super-resolution fluorescence and light sheet microscopy), a small-molecule focussed mass spectrometry facility and NMR spectroscopy.

Applications are encouraged from outstanding scientists in the following fields of Applied Geomicrobiology: bioremediation, biohydrometallurgy, and biotechnology applied to geological and

mining systems. We are particularly keen to seek applications from those whose work distinctively augments our current strengths in ore deposit exploration, mining and environmental management and protection, and geotechnical and safety engineering.

The full job description (role profile) for Lecturer (Education and Research) posts can be found on our website at http://admin.exeter.ac.uk/personnel/academic_paths/academic_paths_tandr.shtml. This summarises the main duties and accountabilities of the post and is not comprehensive: the post-holder may be required to undertake other duties of similar level and responsibility.

Main purpose of the job:
To fulfil research, teaching and administration duties as a lecturer in Applied Geomicrobiology.

To contribute to extending the research profile of Applied Geomicrobiology, particularly in areas related or complementary to geology and mining.

Research
To contribute to enhancing the quality and quantity of Applied Geomicrobiology research at Exeter in an area related or complementary to existing research strengths, including:

- Ore deposit exploration, mining and environmental management and protection; geotechnical and safety engineering.

To conduct independent research and act as principal investigator and project leader, and in so doing:

- Enhance the College's international reputation through research publications of appropriate quantity and quality, and contribute to worldwide debate at national and international conferences, and
- Win research earnings through carefully prepared and successful grant applications as well as identifying potential income-generating programmes and collaborative partnerships.

To supervise research projects, managing any dedicated research staff and postgraduate research students.

To help promote a collegiate working atmosphere and stimulating environment that will attract further research staff of the highest quality as well as good postgraduate research students.

To contribute to the further and ongoing development of Applied Geomicrobiology research at Exeter, especially in the area of sustainability.

Teaching
To develop and deliver undergraduate courses to appropriate academic standards such that:

- Knowledge acquired from research translates to teaching
- Accreditation by professional bodies is obtained where appropriate
- Students are challenged but also tutored and supported with individual care
- Teaching and learning techniques are innovative and inspiring
- Students are supervised appropriately
- Assessment criteria are appropriate, and fairly applied with results fed back to students appropriately
- Module content is continuously reviewed to identify areas for improvement

General
To contribute to the overall general and academic management in the College by undertaking activities that may be required such as:

- Developing overall academic content and structure of modules with colleagues
- Developing ideas for generating income
- Supporting admissions processes and procedures
- Supporting examinations processes and procedures
- Contributing to the work of College committees
- Contributing to accreditation and quality control processes

Person Specification

The successful applicant will have an independent research programme that will strengthen and complement the existing team at the University. He/she will be able to demonstrate the following qualities and characteristics:

1. PhD (Optional or nearing completion) or equivalent in Geomicrobiology.

2. Sufficient knowledge in Geomicrobiology and Applied Geomicrobiology, especially with respect to bioremediation, biohydrometallurgy, and biotechnology applied to geological and mining systems, to develop teaching and research programmes
3. A strong record in attracting research funding, or demonstrable potential to attract such funding.
4. Teamwork skills to work in collaboration with existing group members
5. An active and supportive approach to inter-disciplinary and multi-disciplinary research that will help to foster interactions and links both within the University and externally with other educational bodies, professional institutions and employers
6. The attitude and ability to engage in continuous professional development
7. The aptitude to develop familiarity with a variety of strategies to promote and assess learning
8. Enthusiasm for delivering undergraduate programmes

Terms & Conditions
Our Terms and Conditions of Employment can be viewed here.

Further Information
Please see our website for further information on working at the University of Exeter.