

POSITION DESCRIPTION

Job Title:	Lecturer in Exploration Geophysics
Organisation Unit:	School of Earth Sciences
Position Number:	3023234
Type of Employment:	Continuing full-time or 5 year-fixed term
Classification:	Level A or B (based on experience)

BACKGROUND

Organisational Environment

The Federal Government's 2010 Excellence in Research for Australia survey confirmed The University of Queensland as one of the nation's top two universities, measured on a combination of research quality and breadth. ERA reported that research at UQ is above world standard in more broad fields than at any other Australian university: this reflects UQ's leading global role in many areas of discovery. More researchers at UQ are working in research fields that ERA has assessed above world standard than at any other Australian university. UQ's outstanding critical mass offers researchers significant interdisciplinary capability.

UQ integrates its research strengths with excellent teaching and learning and has won more national teaching awards than any other Australian university. The Times Higher Education-QS table ranks UQ in the top 100 universities globally, and the Shanghai Jiao Tong University World Rankings names UQ as a top 20 Asia-Pacific institution. UQ is one of Australia's Group of Eight, and a founding member of Universitas 21, an international consortium of leading research-intensive universities.

UQ's 44,000-strong student community includes 10,000 postgraduate scholars and almost 10,000 international students from 134 countries. The University has 6300 academic and professional staff and a \$1.4 billion annual operating budget. Its major campuses are at St Lucia, Ipswich, Gatton and Herston, in addition to teaching and research sites around Queensland and Brisbane city. The University has six faculties and eight institutes. The institutes — funded by government and industry grants, philanthropy and commercialisation activities — have built scale and focus in research areas that UQ regards as strategically important.

The School of Earth Sciences is a young and dynamic school formed in January 2009, by amalgamation of the pre-existing Department of Earth Sciences and Earth Systems Science Computational Centre (ESSCC). The school currently comprises 13 teaching and 18 research staff. The School is home to the Geological Sciences major at UQ., and offers professional level qualification in geophysics, via the B.Sc.Hons. (Exploration Geophysics), or via a course work Masters program.

The School has a substantial postgraduate program that makes use of a world-class complex of computational and analytical facilities. Supercomputer facilities facilitate leading edge research in computational geophysics. Research in exploration geophysics often takes advantage of industrial collaborations. The school's analytical facilities include major and trace element geochemistry, noble gas geochemistry and geochronology, radiogenic and stable isotope facilities, organic geochemistry, and fluid inclusion studies.

Details on the research interests of academic staff in the School of Earth Science can be found on the web at <http://www.earth.uq.edu.au>

Information for Prospective Staff

Information about the University, State of Queensland, living in Brisbane and employment at the University can be found at <http://www.uq.edu.au/staff>.

For a full list of benefits of working at the University of Queensland visit our Total Employment Proposition web site at <http://www.uq.edu.au/current-staff/index.html?page=133455&pid=108606>.

The University of Queensland Enterprise Agreement (Academic Staff) outlines the position classification standards for Levels A to E.

Further information about the Faculty and the School may be accessed on the Faculty's web site at [http://www.uq.edu.au/academic discipline](http://www.uq.edu.au/academic%20discipline)

DUTY STATEMENT

Primary Purpose of Position

To engage, as a lecturer, in undergraduate and postgraduate teaching, postgraduate supervision, and further development of the School's Earth Sciences program, as well as performing research, administrative and other activities associated with the School.

Duties

Duties and responsibilities include, but are not limited to:

Teaching and Learning

- Teach undergraduate subjects in the Earth Sciences program and other programs as required.
- Initiate and develop course material.
- Coordinate courses.
- Cooperate in the organisation of geophysical field trips.
- Teach and supervise at honours and postgraduate level.
- Provide support for other positions during absences.

Research

- Develop a research program including external funding.
- Develop a program of applied research in the area of exploration geophysics.
- Work with colleagues and postgraduates in the development of joint research projects.

Community Service

- Foster the School's relations with industry, government departments, professional bodies and the wider community.

Administration

- Perform a range of administrative functions in the School.
- Comply with the University's Code of Conduct (see the University's web site at <http://www.uq.edu.au/hupp/?page=24987>)

Occupational Health and Safety:

- Comply with requirements of Queensland occupational health and safety (OH&S) legislation and related OH&S responsibilities and procedures developed by the University or School. (see the University's web site at <http://www.uq.edu.au/ohs/index.html?page=133956>)

Reporting Relationships

The position reports to the head of School.

SELECTION CRITERIA

Qualifications

Essential

- PhD in the area of Exploration / Applied Geophysics. Preference will be given to candidates whose Ph.D. is complementary to seismic geophysics (e.g. potential field geophysics, electrical and electromagnetics, etc).

Knowledge and Skills

Essential

- Demonstrated knowledge across the range of methods used in exploration geophysics (application of geophysics to resource exploration).
- Ability to teach at introductory and intermediate level across the range of applied geophysical techniques.
- Expert knowledge and experience in one or more geophysical technique. Preference will be given to candidates whose skills are complementary to seismic geophysics (e.g. potential field geophysics, electrical and electromagnetics, etc).
- Ability to develop and teach specialised courses at postgraduate level.
- Ability to supervise postgraduate theses.
- An ability to establish effective relationships and to represent and promote earth sciences at a university and wider community level, including industry, government and professional bodies.

Desirable

- Developed industry liaisons and professional contacts.

Experience

Essential

- Experience in geophysical field work using a range of geophysical methods and equipment.
- Familiarity with basic electronics and equipment maintenance.
- Experience in geophysical software development, using languages common to exploration geophysics (e.g. Fortran, C, Python).
- Familiarity with common geophysical computing platforms (Linux, Windows).
- Evidence of publication in the area of exploration/ applied geophysics in high-ranking refereed journals.

Desirable

- Experience in liaising and collaborating with external agencies to develop co-operative research initiatives.
- Research in projects associated with resource industries (hydrocarbons, minerals, engineering).
- Evidence of a contribution to research, including successful external grant applications.

Personal Qualities

Essential

- Ability to work collaboratively with colleagues.
- Ability to establish rapport with students, and engage them in subject material.
- High level communication, inter-personal and communication skills

Seminar

Applicants invited for interview will be expected to present a seminar in conjunction with the selection interview process. The aim of this seminar is to provide evidence of the calibre and quality of the applicant's research background.

Lecture

Applicants invited for interview will also be expected to prepare a 50-minute lecture on a topic of their choice to be delivered to students in the School of Earth Sciences. The aim of this lecture is to provide evidence of the applicant's ability to teach students.

The University of Queensland is an equal opportunity employer.

Smoking is prohibited in all University buildings.