POSITION DESCRIPTION

Position Title: Principal Research Fellow - Geology
Organisation Unit: WH Bryan Mining and Geology Research Centre (BRC)
Position Number: 3044798
Type of Employment: Part time (80% FTE), Fixed term until Dec 2021
Classification: Academic Research Level D

THE UNIVERSITY OF QUEENSLAND

The University of Queensland (UQ) contributes positively to society by engaging in the creation, preservation, transfer and application of knowledge. UQ helps shape the future by bringing together and developing leaders in their fields to inspire the next generation and to advance ideas that benefit the world. UQ strives for the personal and professional success of its students, staff and alumni. For more than a century, we have educated and worked with outstanding people to deliver knowledge leadership for a better world.

UQ ranks in the world’s top universities, as measured by several key independent ranking, including the CWTS Leiden Ranking (32), the Performance Ranking of Scientific Papers for World Universities (40), the US News Best Global Universities Rankings (42), QS World University Rankings (47), Academic Ranking of World Universities (54), and the Times Higher Education World University Rankings (66). Excluding the award component, UQ is now ranked 45th in the world in the ARWU, and is one of the only two Australian universities to be included in the global top 50.

UQ has an outstanding reputation for the quality of its teachers, its educational programs and employment outcomes for its students. Our students remain at the heart of what we do. The UQ experience – the UQ Advantage – is distinguished by a research enriched curriculum, international collaborations, industry engagement and opportunities that nurture and develop future leaders. UQ has a strong focus on teaching excellence, winning more national teaching excellence awards than any other in the country and attracting the majority of Queensland’s highest academic achievers, as well as top interstate and overseas students.

UQ is one of Australia’s Group of Eight, a charter member of edX and a founding member of Universitas 21, an international consortium of leading research-intensive universities.

Our 53,000-plus strong student community includes more than 16,400 postgraduate scholars and more than 17,000 international students from 135 countries, adding to its proud 260,000-plus alumni. The University has more than 6,600 academic and professional staff (full-time equivalent) and a $2.15 billion annual operating budget. Its major campuses are at St Lucia, Gatton and Herston, in addition to teaching and research sites around Queensland and Brisbane city. The University has six Faculties and four University-level Institutes. The Institutes, funded by government and industry grants, philanthropy and commercialisation activities, have built scale and focus in research areas in neuroscience, biomolecular and
biomedical sciences, sustainable minerals, bioengineering and nanotechnology, as well as social science research.

UQ has an outstanding track-record in commercialisation of our innovation with major technologies employed across the globe and integral to gross product sales of $11billion+.

UQ has a rapidly growing record of attracting philanthropic support for its activities and this will be a strategic focus going forward.

Organisational Environment

The University of Queensland's Sustainable Minerals Institute (SMI) is a world-leading research institute integrating the expertise of technical, environmental and social specialists to deliver responsible resource development across the life of mine. We are dedicated to finding knowledge-based solutions to the sustainability challenges of the global minerals industry, and training the next generation of industry leaders.

SMI is home to six research centres and a Centre of Excellence based in Chile. We have a strong track record in developing world leading solutions in exploration, mining, mineral processing, workplace health and safety, mine rehabilitation, social responsibility, water and energy.

At SMI, we are truly independent, objective and rigorous and our researchers have experience working across the research, government and industry sectors. We offer professional development training to many of our partners and can tailor courses to suit industry trends or company needs. We offer supervision to PhD students and are proud that our alumni are now in senior roles in resource companies and government organisations around the world.

SMI comprises seven major research Centres:

- WH Bryan Mining and Geology Research Centre
- Julius Kruttschnitt Mineral Research Centre
- Centre for Social Responsibility in Mining
- Minerals Industry Safety and Health Centre
- Centre for Mined Land Rehabilitation
- Centre for Water in the Minerals Industry
- International Centre of Excellence in Chile


The W.H. Bryan Mining and Geology Research Centre (BRC) is known for practical innovation in mass mining and global leadership in deep mine development and operation. It has three complimentary applied research programmes that draw on expertise in geological and mining processes to target more accurate performance predictions for higher capacity mining, quantitative modelling of orebodies including variability and uncertainty for informed decision-making; achieving greater productivity from current mine to mill operations; and growing institutional capabilities in resource stewardship and advancing the discovery of deep, large ore bodies.

Information about the Centre may be accessed on their web site at http://www.brc.uq.edu.au/
Information for Prospective Staff

Information about life at UQ including staff benefits, relocation and UQ campuses is available online.

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

DUTY STATEMENT

Primary Purpose of Position

The purpose of this position is to undertake a research role in the development and application of geological models to aid in effective exploration and downstream mineral processing, from deposit to regional scale. The position will play an integral role in the ongoing research activities of the SMI-BRC Geology Program, which is aimed at bringing world-class geological insights to every stage in the path from exploration to mining to mineral processing.

The successful candidate will be expected to implement research that takes into account the development agenda as set by SMI-BRC including aspects of innovative mining based on enhanced deposit knowledge. This is by augmenting geoscientific data and knowledge input into all stages of discovery to recovery, including mine planning, development and effective operations. The focus is on better management of geological and engineering risks and ultimately better resource stewardship.

To engage, as a Principal Research Fellow, in research for industry outcomes, postgraduate teaching and supervision, and further development of the Institute’s research programs, as well as performing administrative and other activities associated with the Institute and its Centres.

Duties

Duties and responsibilities include, but are not limited to:

Research

- Develop an independent and/or team research program including external funding, and achieve national and international recognition in the analysis, interpretation and improved targeting of geologically complex orebodies,
- Develop an ongoing program of discovery, applied and contract research in the area of Geological model development from deposit to regional scale,
- Contribute as a chief investigator to collaborations which yield new insights and opportunities in the field of geological analysis and structural geology applied to the prediction and understanding of orebodies, and have an international reputation for quality and impact of work through publication,
- Conduct research and publish scholarly papers in high quality outlets,
- Obtain and successfully manage external competitive research grants, and consistently lead successful applications for external competitive research funding,
- Lead a research team and foster the research activities of others.
Teaching and Learning

- As a ‘Research focussed’ position there is no formal requirement for undergraduate teaching. However it is encouraged that you actively seek teaching opportunities.
- Participate in events to attract postgraduate students to the Institute,
- Provide leadership within the Centre in research training and supervision,
- Develop and deliver high quality Industry training courses

Industry Liaison

- Represent the University in industry or funding body forums,
- Develop and deliver original presentations to Industry,
- Write reports for Industry and advise on significant Industry issues,
- Produce and deliver educational material for Industry,
- Develop and maintain significant networks across industries and foster an environment where networks and relationships are built and maintained.

Service and Engagement

- Perform a range of administrative functions in the Institute,
- Contribute to the processes that enable the academic team to manage the work of the Institute, including participation in Institute and Centre decision-making and serving on Institute committees,
- Perform a range of higher level internal duties and provide strong contribution to activities relevant to the Centre and Institute and the external community – including industry,
- Make a strong contribution to the governance of the Institute, including mentoring less experienced staff.
- Foster the Institute’s relations with industry, government departments, professional bodies and the wider community,
- Show professional leadership and engage with the community and industry
- Any other duties as reasonably directed by your supervisor
- Please refer to the Criteria for Academic Performance

Other

- Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including but not exclusive to:
  - the University’s Code of Conduct
  - requirements of the Queensland occupational health and safety (OH&S) legislation and related OH&S responsibilities and procedures developed by the University or Institute/School
  - the adoption of sustainable practices in all work activities and compliance with associated legislation and related University sustainability responsibilities and procedures
requirements of the Education Services for Overseas Students Act 2000, the National Code 2007 and associated legislation, and related responsibilities and procedures developed by the University.

Organisational Relationships

The position reports to the Program Leader – Geology of the SMI-BRC.

SELECTION CRITERIA

- PhD in a relevant discipline,
- At least 10 years, demonstrated expert knowledge in the area of Mineral Deposit and structural geology,
- Demonstrated significant contribution to research, including successful external grant applications,
- An ability to establish effective relationships and to represent and promote Mineral Deposit Geology at a university and wider community level, including industry, government and professional bodies,
- Established international reputation for quality and impact of work through publication or exhibition in internationally-recognised outlets,
- Significant experience in building and maintaining positive relationships with a wide range of stakeholders including national and international industry liaisons and professional contacts,
- Significant experience in seeking and securing funding for short, medium and long-term projects/activities in a University or similar environment, and/or in the public or private sector,
- Significant Experience in liaising and collaborating with external agencies to develop co-operative research initiatives and deliver tangible outputs to industry,
- Ability to contribute to supervision of Honours and Research Higher Degree students to successful completion,
- Ability to work independently and collaboratively with colleagues,
- Ability to build and maintain positive relationships with a wide range of stakeholders including national and international industry liaisons and professional contacts,
- Significant experience in mentoring less experienced Institute staff.

Qualification Verification

An appointment to this position is subject to the verification of the highest academic qualification from the conferring institution.

The University of Queensland values diversity and inclusion and actively encourages applications from those who bring diversity to the University. Please refer to the University’s Diversity and Inclusion webpage for further information and points of contact if you require additional support.

This role is a full-time position; however flexible working arrangements may be negotiated.

Accessibility requirements and/or adjustments can be directed to recruitment@uq.edu.au.