POSITION DESCRIPTION

Position Title: Senior Research Fellow – Exploration and Mining Geology and Senior Research Fellow – Geometallurgy and Applied Geochemistry

Organisation Unit: WH Bryan Mining and Geology Research Centre (BRC)

Position Number: 3044063 and 3044062

Type of Employment: Full time, Fixed term until Dec 2021

Classification: Academic Research Level C

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 these positions are to develop, manage and undertake a lead research role in exploration and mining geology and geometallurgy within BRC's research programs that work together and with other SMI Centres to provide an integrated understanding of the mining value chain. The successful candidate will be expected to conceive and implement research that takes into account the development agenda as set by the 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, mineral processing and effective operations. The focus is on better management of geological and engineering risks and ultimately better resource stewardship.

Duties

Duties and responsibilities include, but are not limited to:

Research

- Maintain and develop research expertise in the discipline of the assigned research projects within the area of ore deposit geology and geometallurgy / geometallurgy and applied geochemistry
- Undertake research individually or as part of a project team
- Take responsibility for planning and implementing world-class research projects
- Liaise with project sponsors and conduct experimental work at field sites
- Prepare research reports and presentations for sponsors
- Assist in the development of new research initiatives following on from the projects, and lead the development of new initiatives in some instances
- Provide guidance and assistance to other staff and students
- Publish the results of research in international journals, other appropriate refereed publications and conferences

Management

- Manage research projects to delivery projects on time and in budget
- Mentor and assist in the career development of staff and students reporting to this position
• Coordinate research activities in collaborative projects with other research institutions
• Manage the relationships with industry sponsors; develop a network within the minerals industry to support research initiation, carriage of projects and transfer/uptake of outcomes.

Teaching and Learning
• Supervisor Postgraduate students
• Be part of a team that may be required to develop industry training courses

Other
• Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including but not exclusive to:
  o the University's Code of Conduct
  o 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
  o the adoption of sustainable practices in all work activities and compliance with associated legislation and related University sustainability responsibilities and procedures
  o 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 positions reports to a Professorial staff member of the BRC.

SELECTION CRITERIA

• PhD in a relevant discipline (exploration and mining geology / geometallurgy and applied geochemistry)
• Demonstrated high level knowledge in applied geoscience and experience in addressing geological and engineering questions relevant to the minerals sector
• Excellent research management skills
• Ability to conceptualise, develop and critically review new research initiatives
• Well-developed presentation skills
• Excellent verbal and written communication skills
• Innovative, with a strong desire to conduct applied research
• Demonstrated investigative skills
• Evidence of leadership of significant projects relevant to mining and exploration
• A strong track record of industry-collaborative research relating to mining (e.g. analysing and interpreting exploration and mine site geoscientific data; production control; mine mapping; geometallurgical studies) or applied research relating to the mining value chain
• Ability to motivate a group of high calibre research staff and postgraduate students
• Ability to work harmoniously within a team, while maintaining a high individual profile in a research area

Desireable
• Experience in the application of innovative technologies for characterization and analysis applied to exploration and mining research challenges
• Experience in liaising and collaborating with research groups or external organisations to develop co-operative research initiatives
• Experience in the formulation and supervision of postgraduate research projects

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.