POSITION DESCRIPTION

Position Title: Postdoctoral Research Fellow / Research Officer
Organisation Unit: Centre for Mined Land Rehabilitation
Position Number: 3038724
Type of Employment: Full Time, Fixed Term for 1 year
Classification: Academic Level A

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 Performance Ranking of Scientific Papers for World Universities (45), the US News Best Global Universities Rankings (52), QS World University Rankings (51), Academic Ranking of World Universities (55), and the Times Higher Education World University Rankings (60). UQ again topped the nation in the prestigious Nature Index; and secured a greater share of Australian Research Council grants in 2016 ($24.5 million) than any other university nationally.

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 50,000-plus strong student community includes more than 13,000 postgraduate scholars and more than 12,000 international students from 144 countries, adding to its proud 230,000-plus alumni. The University has about 7,000 academic and professional staff and a $1.7 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+ (see http://uniquest.com.au/our-track-record).

UQ has a rapidly growing record of attracting philanthropic support for its activities and will have further success in this area as an important strategic aim going forward.

**Organisational Environment**

One of UQ’s eight research institutes, the Sustainable Minerals Institute (SMI) consists of some 200 staff and postgraduate students covering the areas of mining and geology, mineral processing, environment and rehabilitation, social responsibility, safety and risk, water and unconventional gas. SMI is industry-focused and consequently works with many leading global resources companies and many small-medium enterprises and suppliers. SMI interacts strongly with governments and community. A priority for SMI is the development of talent and providing an environment for successful and rewarding careers.

SMI was founded in 2001 and since its inception has established a reputation as a unique institution for integrated sustainable development research in the resource sector. SMI is a truly global institute with staff and students from around the world. SMI’s people are also diverse in their discipline backgrounds, which range across disciplines including anthropology, geology, soil science, sociology, hydrology, environmental science, engineering and mine management.


SMI comprises six major research Centres which are organised into pairs:

SMI’s Production Centres are the:  
WH Bryan Mining and Geology Research Centre  
Julius Kruttschnitt Mineral Research Centre

SMI’s People Centres are the:  
Centre for Social Responsibility in Mining  
Minerals Industry Safety and Health Centre

SMI’s Environment Centres are the:  
Centre for Mined Land Rehabilitation  
Centre for Water in the Minerals Industry

**The Centre for Mined Land Rehabilitation (CMLR)** is one of the research centres within the Environment Centre pair within SMI. The CMLR collaboratively engages in a broad spectrum of environmental research and education activities for the mining and mineral processing industries and associated government departments, at both national and international levels.

CMLR has core disciplinary strengths in the basic and applied biological, chemical and physical sciences, working at scales and technologies from the microbial to the catchment and regional. The majority of the research agenda is presently encompassed within the four key themes of Environmental Geochemistry, Landform Stability, Soil-Plant Systems, and Landscape Ecology, with complementary collaborative research programs currently in the areas of ecotoxicology and fauna ecology.

Further information on the CMLR may be accessed via [http://www.cmlr.uq.edu.au](http://www.cmlr.uq.edu.au).
Information for Prospective Staff

Information about life at UQ including staff benefits, relocation and UQ campuses is available at - [http://www.uq.edu.au/current-staff/working-at-uq](http://www.uq.edu.au/current-staff/working-at-uq)

The University of Queensland [Enterprise Agreement](http://www.uq.edu.au/current-staff/working-at-uq) outlines the position classification standards for Levels A to E.

DUTY STATEMENT

Primary Purpose of Position

To assist with the integration of high resolution remote sensed imagery with on-ground observations.

Duties

Duties and responsibilities include, but are not limited to:

**Teaching and Learning**

- Support of graduate students in the collection of imagery and field measurement methods.

**Research**

- Assess remote sensing data including image collection, processing and error analysis.
- Conduct environmental and ecological ground observations in support of interpretation of imagery collected.
- Develop and publish scholarly papers in collaboration with research staff.
- Develop and maintain a GIS database for storage and effective use of spatial data and remotely sensed imagery

**Service and Engagement**

- Support the Institute and Centre’s relations with industry, government departments and the wider community.
- Perform a range of administrative functions in the CMLR
- Contribute to the processes that enable the academic team to manage the work of the CMLR
- Any other duties as reasonably directed by your supervisor
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 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 Assoc Prof Peter Erskine.

SELECTION CRITERIA

Essential

- Tertiary education in environmental science or geospatial sciences
- Ability to work with remote sensing + GIS data and conduct spatially based statistical analyses
- Plant identification and environmental sampling experience or interest
- Experience and willingness to conduct fieldwork in remote locations with minimal supervision
- Ability to interact effectively with a range of stakeholders with differing views
- Self-motivated goal oriented approach to projects and time management skills
- Australian drivers licence

Desirable

- PhD in ecology, environmental science or geospatial sciences
- Publication record in the fields of plant ecology and/or spatial ecology
- Experience with photogrammetry and data handling and analysis
- Motivation to develop a productive and effective research portfolio funded by external sources
- Familiarity and capability with the R statistical package
- Remote Pilot Licence (RePL) and experience with a range of remotely piloted aircraft systems
- Experience with ecohydrology and plant soil moisture interactions.

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

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The University of Queensland values diversity and inclusion.

Applications are particularly encouraged from Aboriginal and Torres Strait Islander peoples. For further information please contact our Australian Indigenous Employment Coordinator at:

atsi_recruitment@uq.edu.au

Applications are also encouraged from women.

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