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## POSITION DESCRIPTION

<b>Position Title:</b>	Senior Research Fellow
<b>Organisation Unit:</b>	Sustainable Minerals Institute, Julius Kruttschnitt Mineral Research Centre (JKMRC)
<b>Position Number:</b>	3043459
<b>Type of Employment:</b>	Full Time, fixed term
<b>Classification:</b>	Research Academic 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 Performance Ranking of Scientific Papers for World Universities (43), the US News Best Global Universities Rankings (52), QS World University Rankings (47), Academic Ranking of World Universities (55), and the Times Higher Education World University Rankings (65). UQ again topped the nation in the prestigious Nature Index and our Life Sciences subject field ranking in the Academic Ranking of World Universities was the highest in Australia at 20.

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 240,000-plus alumni. The University has about 7,000 academic and professional staff and a \$1.8 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://uniquet.com.au/our-track-record>).

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

## Organisational Environment

One of the UQ's eight research institutes, the Sustainable Minerals Institute (SMI) consists of some 240 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.

The Institute recognises and values equity and diversity, and encourages applications from any individual who meets the requirements of this position irrespective of gender, sexuality, race, ethnicity, religion, disability, age or other protected attributes. SMI strives to provide an inclusive working environment, and along with the University is committed to supporting staff with family and caring responsibilities by providing policies, programs and initiatives to help balance work and family responsibilities.

Information about the Institute may be accessed on the Institute's web site at <http://www.uq.edu.au/smi>.

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 **Julius Kruttschnitt Minerals Research Centre (JKMRC)** is a world-renowned research and postgraduate education organisation, located at Indooroopilly in Brisbane, approximately 7 km from the main University of Queensland campus. It was established in 1970, and now forms part of the University's Sustainable Minerals Institute.

The mission of the JKMRC is to deliver world-class, customer-focussed education, research and technical services to the world minerals industry and allied sectors. The JKMRC has an international reputation for applied research in the areas of mineral processing and geometallurgy. It specialises in ore characterisation, mineral processing unit operations such

as comminution and flotation, applied mineralogy, and the interface between mining and processing. Its emphasis on systems analysis by mathematical modelling and process simulations has led to major new methodologies in the design and optimisation of mineral processing operations. It works closely with the international minerals industry and with other research providers in Australia and overseas. It has graduated in excess of 200 Masters and PhD students, and won many awards for its research. It has a proven record of technology transfer through JKTech, which has significant experience in the commercial delivery of JKMRC research outcomes, particularly in simulation software and ore characterisation methodologies.

Further information on the JKMRC may be accessed via <http://www.jkmrc.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>

The University of Queensland [Enterprise Agreement](#) outlines the position classification standards for Levels A to E.

## **DUTY STATEMENT**

### **Primary Purpose of Position**

This role will act as a senior researcher within the JKMRC Separation Program, developing strategy, co-ordinating, managing and undertaking high quality research for the JKMRC, primarily in the area of flotation with a focus on coarse particle flotation and flotation chemistry. The role will also involve supervision of HDR students.

### **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 recognition in the research area.
- Conduct research and publish scholarly papers in high quality outlets.
- Develop an ongoing program of discovery, applied and contract research in the area of flotation.
- Contribute as a chief investigator to collaborations which yield new insights and opportunities.
- Develop relationships with industry and other research institutes to form research partnerships.

#### **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,

- Have an active and effective record of principal supervision of research higher degree students.

### **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 a relevant industry network.

### **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 Centre decision-making and serving on Institute committees,
- Perform a range of internal duties and provide contribution to activities relevant to the Centre and Institute and the external community – including industry.
- Foster the Institute's relations with industry, government departments, professional bodies, other research institutes and the wider community
- 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 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 Group Leader of the Separation Program.

## SELECTION CRITERIA

### Essential

- PhD in a relevant discipline,
- Demonstrated expert knowledge in the area of flotation,
- Significant contribution to research, including successful external grant applications,
- Track record of supervision of Honours and Research Higher Degree students to successful completion,
- An ability to establish effective relationships and to represent and promote flotation at a university and wider community level, including industry, government and professional bodies,
- Established record of publication or exhibition in high-quality outlets and national recognition with a developing international profile for research,
- Experience in liaising and collaborating with external agencies to develop co-operative research initiatives and deliver tangible outputs to industry,
- Ability to build and maintain positive relationships with a wide range of stakeholders including national and international industry liaisons and professional contacts,
- Ability to work independently and collaboratively with colleagues,
- Ability to mentor less experienced Institute staff.
- Excellent written and oral communication skills.

### Desirable

- Experience in the areas of flotation chemistry and coarse particle flotation
- Developed industry liaisons and professional contacts.
- Experience at developing strategic research initiatives in industry or in academia
- Experience in liaising and collaborating with external agencies to develop co-operative research initiatives.

### **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 (<http://www.uq.edu.au/equity>) for further information and points of contact if you require additional support.**

**Accessibility requirements and/or adjustments can be directed to the contact person listed in the job advertisement.**