

POSITION DESCRIPTION

Position Title:	Postdoctoral Research Fellow
Organisation Unit:	School of Chemical Engineering
Position Number:	
Type of Employment:	Full-time, Fixed Term
Classification:	Research 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 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 School of Chemical Engineering is an international leader in the chemical engineering field and has an excellent reputation, built over 100 years at The University of Queensland.

We deliver quality programs and leadership in chemical engineering education, research and development, and expert consulting to support the process industries. Undergraduate teaching within the School focuses on the disciplines of chemical, bioprocess, biomedical, environmental and metallurgical engineering and postgraduate programs are available in growing fields including water, sustainable energy, bioprocess and biomedical engineering. The School's project-centered curriculum has been recognised as an international exemplar of engineering education.

Worldwide, UQ Chemical Engineering was ranked 33rd in the QS World University Rankings 2019 for Chemical Engineering. Central to the School's success are our staff, specifically the academic, research and professional staff. They are engaged in pioneering teaching and research crossing traditional disciplinary boundaries, mindful of their role in addressing the big challenges that lie ahead.

Catalysed by our move to a new home for Chemical Engineering at UQ in 2021, the soon to be completed eleven story, state-of-the-art Andrew N. Liveris Building, the School is entering an exciting growth and rejuvenation phase. We are wanting to recruit new staff who are passionate and committed to building on our long-standing acknowledged successes in cutting-edge teaching and learning, research impact and industry and public sector engagement, to further increase our local and international impact in learning and discovery in chemical engineering.

Our people are our greatest asset. We offer collaborative, inclusive work and study places, which are enriched by the significant diversity of our staff, students and community. We genuinely believe that creativity and innovation flourishes in an environment where people feel supported, valued and empowered. Mutual respect, inclusivity and accountability are at the cornerstone of UQ's culture.

The School of Chemical Engineering is committed to supporting the career growth of women academics and have a number of initiatives to support women in developing and achieving a fulfilling career within the School.

For more information about the School, please visit: www.uq.edu.au/chemeng

Information for Prospective Staff

The School 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. The School 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.

Further 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

The primary purpose of this position will be to join a multi-disciplinary team of chemical engineers, metallurgists, and physical scientists to develop advanced beneficiation processes for Australian coking coals.

Duties

Duties and responsibilities include, but are not limited to:

- Conducting research in the field of particle separation with sound waves or froth flotation.
- Conduct research into coal cleaning and take responsibility for equipment design, data analysis, manuscript preparation and research student supervision.
- Co-ordinate and perform research in relation to the project and develop innovative particle separation methods.
- Develop insights into the beneficiation of Australian coals.
- Actively participate in regular meetings to discuss project objectives, methodology and outcomes, and present progress reports at institutional, national and international forums.
- Publish scholarly papers in high quality outlets.
- Contribute to, or potentially lead, applications for related funding support, as required.
- As a 'Research focussed' position there is no formal requirement for undergraduate teaching. However, it is encouraged that you actively seek teaching opportunities.
- Contribute to mentoring and supervision at undergraduate, honours and postgraduate level and participate in events to attract postgraduate students.
- Provide guest lectures in undergraduate and/or postgraduate coursework.
- Be actively engaged in relevant networks and events where this is likely to contribute to the research and engagement outcomes of the role.

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 Dr Liguang Wang.

SELECTION CRITERIA

- PhD in the area of physics, chemical engineering, mechanical engineering, mineral processing or related area.
- Demonstrated expert knowledge in the area of particle separation.
- Knowledge and experience of equipment design with sound waves.
- The ability to establish effective relationships and to build and promote their research at a University and wider community level, including industry, government and professional bodies.
- Track record of publication of research findings in peer reviewed journals and conferences and developing national recognition in the area of research.
- A high level of drive and enthusiasm, and the ability to work collaboratively with colleagues across different disciplines and cultures.
- Good communication and time management skills, and the ability to meet objectives and deliver milestones within project deadlines.

Seminar

Applicants invited for interview may be expected to present a seminar in conjunction with the selection interview process.

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.

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

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