



POSITION DESCRIPTION

Position Title:	Postdoctoral Research Fellow
Organisation Unit:	School of Mathematics and Physics
Position Number:	New
Type of Employment:	Full-time, fixed term for 16 months
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 (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

The School of Mathematics and Physics is a School within the Faculty of Science at the University of Queensland. The Discipline of Mathematics is located in the School of Mathematics and Physics. It is the leading provider of tertiary mathematics education in Queensland. Undergraduate programs offered are BMath, BSc, BA (each with an Honours year) and BAdvSci; Coursework degrees (MSc, MFinMath, MDataSc) and research degrees (MPhil and PhD) are offered at postgraduate level.

The Discipline is internationally recognised for its research excellence and hosts a number of first class research centres. Research is carried out at the cutting edge across a broad spectrum of areas in Mathematics and Statistics.

The position is based at the St. Lucia campus of The University of Queensland, one of the most spacious and attractive university campuses in Australia. The campus is centrally located near major public transport routes.

Details of the research interests of academic staff may be accessed on the school's web site at <http://www.smp.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

To carry out research on computational modelling of failure in porous materials.

Duties

Duties and responsibilities include, but are not limited to:

Research

- Conduct research and publish scholarly papers.
- Actively participate in the activities of the research group.

- Collaborate with all the Chief Investigators relevant to the project, including those at The University of Western Australia.
- Participate in applications for external research funding support.

Service and Engagement

- Perform administrative functions in the School as appropriate to the level of appointment.
- 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 A/Prof Anthony Roberts.

SELECTION CRITERIA

Essential

- Hold a PhD in the area of applied mathematics, engineering or a relevant discipline.
- Demonstrated expert knowledge in the area of computational solid mechanics.
- Demonstrated scientific programming skills.
- Evidence of a contribution to research, including publication of research in peer-reviewed journals.
- High level written and interpersonal communication skills.
- Ability to work effectively both independently and collaboratively with colleagues.

Desirable

- Knowledge of fracture mechanics.

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. Applications are particularly encouraged from Aboriginal and Torres Strait Islander peoples. Applications are particularly encouraged from women.

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

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