



POSITION DESCRIPTION

Position Title:	Postdoctoral Research Fellow
Organisation Unit:	School of Chemistry and Molecular Biosciences
Position Number:	New
Type of Employment:	Full Time Fixed Term
Classification:	Academic Research Level A06

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.

Faculty of Science

The Faculty of Science is recognised as a powerhouse for some of the world's leading scientists, teachers, science programs and commercial outcomes. The Faculty is one of the largest Science groupings in Australia, with approximately 1100 (equivalent full-time) staff, and about 7500 (equivalent full-time) students.

Throughout its Schools and Centres, the Faculty unites the disciplines of agriculture and animals, biomedical and biological sciences, chemistry, earth sciences, food sciences, geography, marine science, maths and physics, the environment and veterinary science.

With strong links between the enabling and applied sciences, UQ researchers and graduates are working on a wide range of groundbreaking projects from the molecular characterisation of drug resistant bacteria that affect piglets through to finding better treatments for illness and rehabilitation of the environment.

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

School of Chemistry and Molecular Biosciences

The School of Chemistry and Molecular Biosciences (SCMB) combines the disciplines of Chemistry, Biochemistry & Molecular Biology, Microbiology and Parasitology into a single academic unit. The School has modern research laboratories with state-of-the-art equipment and research infrastructure. The School includes over 50 academic staff, who are widely published internationally and have extensive research backgrounds. Information about the School and research interests of academic staff may be found on the web site <http://www.scmb.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

The appointee will be working as part of a team on Australian Research Council (ARC) and/or Department of Agriculture and Water Resources (DAWR) funded research led by Prof. Craig Williams in the area of caged hydrocarbon synthesis and derivatization leading to translational applications.

Duties

Duties and responsibilities include, but are not limited to:

Research

- Design, synthesise and derivatise novel strained and non-strained caged hydrocarbons for translational applications
- Fully characterise using the full breadth of standard spectroscopic techniques, and analyse synthesised compounds where appropriate to determine translational attributes.
- Be highly proactive in generating high-quality, high-impact journal publications
- Presenting research findings at seminars and conferences
- Advising and supervising postgraduate students and working with colleagues and postgraduates in the development and implementation of joint research projects
- Carefully documenting all methods, procedures and raw data

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 Prof. Craig Williams at the School of Chemistry & Molecular Biosciences.

SELECTION CRITERIA

Essential

- PhD specializing in the area of synthetic organic chemistry pertaining to caged hydrocarbon chemistry.
- At least three years' full-time experience (during the PhD and/or otherwise), or its equivalent, and demonstrated expert knowledge, in the area of strained and non-strained caged hydrocarbons.
- Demonstrated experience with the appropriate application, analysis and interpretation of NMR, MS, IR data.
- Demonstrated experience and proficiency with advanced chromatography techniques such as High Performance Liquid Chromatography.
- Evidence of a high level of contribution to research through publication of scholarly paper(s) in the international literature.
- Positive, can-do attitude
- Ability to work collaboratively within a large multi-disciplinary team
- Strong interpersonal skills
- Ability to organise and prioritise own work with minimal supervision
- Delivery of results to required standard and schedule

Desirable

- Experience with the chemical synthesis and derivatization of caged hydrocarbons.
- Experience with the collection, analysis and interpretation of NMR, MS, IR data.
- Experience advising undergraduate and postgraduate students
- Advanced knowledge of working with various chemical databases (e.g. SciFinder Scholar).
- Knowledge of advanced chromatographic techniques applicable to chemical synthesis.

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.