



POSITION DESCRIPTION

Position Title:	Tritium Visiting Fellow in Electro-Mobility (E-Mobility)
Organisation Unit:	The Dow Centre for Sustainable Engineering Innovation
Position Number:	NEW
Type of Employment:	Full Time, Fixed Term for 3 years
Classification:	Academic Level A/B

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 (60). 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

Tritium Visiting Fellow in E-Mobility (the Tritium Fellow) is hosted by the Dow Centre for Sustainable Engineering Innovation (The Dow Centre).

The Centre's mission is to stimulate engineering innovation towards the more sustainable production and utilisation of materials and energy, with a priority given to changes that can make a substantial contribution to global environmental and social sustainability challenges.

Research at the Centre is interdisciplinary, with a strong techno-economic focus on the viability of industry transitions, delivered through collaboration with other UQ faculties and leading research partners worldwide. The Centre's current projects span the spectrum from systems analysis, to fundamental investigations into game-changing technologies for energy, fuels and materials.

The Dow Centre for Sustainable Engineering Innovation works proudly alongside numerous schools and institutes at the University of Queensland, and collaborates with industry and other educational institutions in Australia and internationally to build multi-disciplinary, global partnerships for education and research.

The Tritium Fellowship is affiliated with Tritium, an innovative Brisbane-based company that provides world-leading fast charging systems designed to support the global transition to e-mobility for clean, healthy and convenient cities. The Tritium Fellow will engage closely with the management and research teams at Tritium.

This Fellowship is made possible through the generous donation of the Trevor and Judith St Baker Family Foundation in association with the St Baker Energy Innovation Fund, a portfolio of clean-tech, energy related start-ups showcasing breakthrough technologies in the fields of energy, transport, and healthcare.

For further information about Tritium, please see: <https://www.tritium.com.au/>. To learn more about the Dow Centre, please see: <http://www.dowcsei.uq.edu.au/about-us>.

Information for Prospective Staff

The successful candidate will join a collaborative community of researchers and academics working across a range of disciplines focused toward advancing sustainability in the production and use of energy and materials on a global scale.

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.

Organisational Relationships

The position reports to the Director of the Dow Centre for Sustainable Engineering Innovation.

DUTY STATEMENT

Primary Purpose of Position

The Tritium Fellow will lead research activities directed toward advancing the performance, economics and uptake of E-Mobility globally. This research will inform public policy, investment decisions, technology innovation, public health studies and community behaviour in support of the transition to sustainable, low-emission, electric-powered transportation.

The Tritium Fellow may also contribute to teaching and learning outcomes at the University through course coordination and lecturing, as well as supervision of PhD students. This unique role is open to candidates with a research background in Engineering, Economics, Behavioural Science, Public Health, or other related disciplines.

The successful candidate will define and lead applied research that seeks to enable and accelerate the expansion of electric vehicle use and/or other forms of electric mobility. The research focus may be region-specific or globally relevant, and could address a variety of issues including, but not limited to:

- Design of improved electric vehicle charging systems;
- The role of electric vehicle batteries in providing electricity storage for grid management;
- Design of policies and incentives to accelerate electric vehicle uptake;
- Urban planning and infrastructure design to accommodate high penetration of electric vehicles;
- Social and behavioural studies in relation to electric vehicle uptake;
- Life cycle analysis of electric mobility benefits; and
- Analysis of co-benefits of electric mobility such as GHG emissions, public health, etc.;

Research undertaken by the Tritium Fellow aligns with the research objectives of the Rapid Switch initiative, a global research collaboration co-led by the University of Queensland and Princeton University that aims to increase our understanding of bottlenecks that could slow the rate of decarbonisation. Its ultimate goal is to inform priorities for technology innovation, capital investment, social change initiatives, and policies aimed at accelerating climate change mitigation, while simultaneously enabling a more prosperous world.

Duties

Duties and responsibilities include, but are not limited to:

Research

- Support the design of research projects with a primary focus on advancing the performance, economics and uptake of E-Mobility, in the areas of Engineering, Economics, Behavioural Science, Public Health, or other relevant discipline.
- Develop close scientific collaboration with other members of a multi-disciplinary, international research community, in association with the Rapid Switch Initiative.
- 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 applications for related funding support, as required.

- Identify IP arising from research and facilitate its protection through established University procedures.

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.
- 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.

Service and Engagement

- Work collaboratively to foster partnerships with Universities, industry, government departments, professional bodies, committees and the wider community, including but not limited to the University of Queensland, Princeton University's Andlinger Centre for Energy & the Environment, The University of New South Wales Energy Institute, Tritium, The St Baker Energy Innovation Fund and Fast Cities Australia.
- Contribute to the development of an international profile in E-Mobility within the University of Queensland and partner institutions, through publication of high-impact research and outreach on policy, practice and/or commercialisation.
- 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.

For Appointment at Level B

As per above, as well as:

- Develop in an independent and/or team research program including external funding, and achieve national recognition in an area Related to E-Mobility.
- Contribute to the processes that enable the academic team to manage the work of relevant organisations at UQ, including participation in decision-making and serving on relevant committees.

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

Selection Criteria

- PhD in Engineering, Economics, Business, Behavioural Science, Public Health or other relevant discipline.
- Demonstrated research, industry or policy experience in areas of relevant to E-Mobility.
- The ability to establish effective relationships and to build and promote the E-Mobility agenda 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.
- Well-developed professional networks.
- Ability to prepare successful applications for research funding.
- Previous work on novel process design or commercialisation of new technologies.

For appointment at Level B

The above Selection Criteria, as well as the following:

- Demonstrated expert knowledge in the discipline area.
- An ability to establish effective relationships and to represent and promote the discipline area at a university and wider community level, including industry, government and professional bodies.
- Contribution to effective supervision of Honours and Research Higher Degree students.
- Developed industry liaisons and professional contacts.
- Evidence of a contribution to research, including successful external grant applications.

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.