



POSITION DESCRIPTION

Position Title:	Lecturer/Senior Lecturer/Associate Professor - Oceanography
Organisation Unit:	School of Earth and Environmental Sciences
Position Number:	TBC
Type of Employment:	Continuing
Classification:	Teaching and Research Academic Level B/C/D

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 Earth and Environmental Sciences (SEES) is part of the Faculty of Science and is located on the St Lucia campus (Brisbane) of the University. It has 104 academic staff, and 23 administrative and technical staff. There is a large contingent of research appointments and the School has been active in establishing a range of adjunct positions in order to promote engagement with leaders in government and the professions.

SEES is a vibrant, multidisciplinary School with extensive teaching and research programs covering the fields of Geology, Geography, Environmental Management, Occupational Health and Safety Sciences and Planning. The School offers a wide range of undergraduate programs including Bachelor's degrees in Arts (Geography) and Science (Geological and Geographical Science), a Bachelor of Environmental Management and Environmental Science, Occupational Health and Safety Science and a Bachelor of Regional and Town Planning. Honours in Geology, Geography, Geophysics, and Computational Earth Sciences. Coursework Masters degrees are offered in Mineral Resources, Environmental Management, Geographic Information Science, Occupational Health and Safety Science and Urban and Regional Planning and the School also contributes to the multi-school Master of Development Practice. The School offers postgraduate training in research via the Master of Philosophy and Doctor of Philosophy and currently has over 150 students enrolled in these degrees. The School has a strong research profile and enjoys an excellent success rate in nationally competitive grants and has a strong record of high-quality publications.

SEES Faculty and students are actively engaged in using UQ's world-class marine research facilities at [Heron Island](#) and [Stradbroke Island](#). Heron Island Research Station (HIRS) is internationally renowned for coral reef research and student training in marine sciences. Facilities and equipment rarely found in an offshore facility combined with its enviable position on the world's largest reef make HIRS the ideal location for marine and climate change research. Situated on the southern Great Barrier Reef, HIRS is the oldest and largest marine research station on the Reef. With crystal clear water and near pristine conditions, the Station provides easy and direct access to the marine environment. Using our special purpose-built research vessel, the R.V. Dorothy Hill, scientists from SEES are able to collect and analyse shallow core samples from dead reef rock in the southern Great Barrier Reef.

Moreton Bay Research Station is located on North Stradbroke Island, providing direct access to the waters of Moreton Bay and the Pacific Ocean as well as the unique terrestrial environments of the 27,700 hectare sand island. Lying on the convergence of the eastern Australian sub-tropical and temperate zones, North Stradbroke Island and the surrounding waters support an incredibly diverse range of terrestrial, coastal and marine ecosystems on which to base research and education activities.

Through the ANZIC consortium, UQ and SEES are also part of the International Ocean Discovery Program (IODP) and our staff and students are involved in scientific expeditions and post-cruise follow-up investigations.

SEES also hosts GIS computer facilities and laboratories and a Remote Sensing Research Centre that is a leader in national and international research and training for biophysical

remote sensing for understanding and solving environmental monitoring management problems.

SEES has excellent sample preparation facilities and a complex analytical infrastructure consisting of trace element, radiogenic and stable isotope geochemistry, radiogenic and noble gas geochronology, coal petrology and organic geochemistry, geomicrobiology and fluid inclusion facilities.

The Centre for Geoanalytical Mass Spectrometry within SEES includes: a Radiogenic Isotope Facility equipped with a Nu Plasma HR Multi Collector-Inductively Coupled Plasma Mass Spectrometer (MC-ICP-MS); a Nu Plasma II MC-ICP-MS for ultra-high-precision multi-isotope analysis and isotope dating, a Thermo X-Series II Quadrupole Inductively Coupled Mass Spectrometer (Q-ICP-MS), one Thermo iCAP-RQ Q-ICP-MS and one Agilent 7900 Q-ICP-MS mainly for high-precision rapid multi-element analysis, as well as two ASI RESOLUTION SE laser systems for *in situ* high-spatial resolution isotope and elemental analysis when coupled with the above ICP-MS machines; a Stable Isotope Geochemistry Laboratory that includes: an Isoprime Continuous Flow Mass Spectrometer with Elemental Analyser and Laser (EA-CF-IRMS), an Isoprime Dual Inlet Mass Spectrometer with Multiprep (DI-IRMS), a Thermo Delta V Advantage Continuous Flow mass spectrometer with thermal combustion elemental analyser, gas bench and liquids and solid zero blank autosamplers (CF-TC/EA IRMS); a combustion isotope ratio mass spectrometer Isoprime-(GC-c-IRMS) together with carbonate as well as mineral hydrogen and fluid inclusion extraction lines; The Environmental Geochemistry Laboratory includes a state-of-the-art Katanax Automatic Fluxer, hot-plate total or partial digestion and high-pressure bomb digestion. Analyses of major and minor elements are performed either on a Perkin Elmer Optima 8300DV Inductively Coupled Optical Emission Spectrometer (ICP-OES) or the Agilent 7900 Inductively-Coupled Plasma Mass-Spectrometer (ICP-MS).

SEES also has an Argon Geochronology Laboratory with a Mass Analyser Products 215-50 noble gas mass-spectrometer (MS) and ultra-high vacuum extraction line as well as a Thermo Fisher HELIX SFT split flight tube noble gas mass-spectrometer (MS).

Further details on our full range of [world-class geochemical facilities](#) can be examined through our website.

A recently built geomicrobiology laboratory provides culturing facilities for aerobic and anaerobic microorganisms, including a coy anaerobic chamber, a photosynthetic growth chamber, fluorescence microscopy, and sample preparation for SEM and TEM analyses of bacteria-mineral interactions. In addition, the School maintains close links with the Centre for Microscopy and Microanalysis, a Major National Research Facility that provides access to electron microscopes (SEMs and TEMs), electron microprobes, X-ray diffractometers, nano-SIMS, surface analysis capabilities, and a host of other modern analytical instrumentation.

Further information and details on the research interests of academic staff in the [School of Earth and Environmental Sciences](#) can be found on the web.

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>.

Applicants should also refer to the [UQ Academic Criteria for Performance policy](#). This policy applies to staff at levels A to E, across all of the academic categories - Teaching and Research, Teaching Focused, Research Focused and Clinical Academic.

DUTY STATEMENT

Primary Purpose of Position

To engage, as a Lecturer/Senior Lecturer/Associate Professor, in undergraduate and postgraduate teaching, postgraduate supervision, and further development of the School's teaching and research in physical/chemical oceanography/ paleoceanography/ marine geology, as well as administrative and other activities associated with the School. This position is offered as a Teaching and Research (T&R) role and candidates will be expected to perform teaching, research and service and engagement duties.

Duties

Duties and responsibilities include, but are not limited to:

Teaching and Learning

Level B, C and D

- Teach undergraduate and postgraduate courses in areas of oceanography/marine geoscience, and in other areas of the School as required.
- Take responsibility for the preparation and delivery of substantial course modules.
- Coordinate one or more courses, including collaboration in curriculum design and delivery where appropriate.
- Enhance teaching of physical/chemical oceanography/ paleoceanography/ marine geology through the development of innovative teaching tools and approaches, including field teaching and flexible delivery.
- Effectively supervise, foster and mentor Higher Degree by research students.
- Continually improve curriculum, teaching resources and approaches.

Level C and D

- Successful coordination of a significant component of curricula within the School.

Level D

- Undertake leadership roles and demonstrate excellence in a range of settings and roles.
- Record of supervising Higher Degree by research students successfully to completion as principal supervisor.

Research

Level B, C and D

- Develop an outstanding program of research in oceanography/marine geoscience such as: chemical oceanography, physical oceanography, paleoceanography, isotopic records of past climate change, marine geology.
- Work with colleagues and postgraduates in the development of joint research projects.
- Take a chief investigator role, potentially in collaboration with more experienced researchers, in applications for external research funding.
- Develop an established record of publication in high quality outlets.
- Achieve national recognition in the chosen research area.

Level C and D

- Undertake independent research.
- Obtain and successfully manage external research funding as a lead investigator.

- Develop an international profile in an area of oceanography/marine geoscience such as: chemical oceanography, physical oceanography, paleoceanography, isotopic records of past climate change, marine geology.

Level D

- Leadership through successful applications for external research funding in a chief investigator role and mentoring of more junior academics and researchers.

Service and Engagement

Level B, C and D

- Efficiently manage allocated internal service roles, in order to contribute to the processes for managing the work of the School.
- Be active in making external contributions to the oceanographic community.
- Foster the School's relations with industry, government departments, professional bodies and the wider community.

Level C and D

- Participate in the management of the School's analytical infrastructure.
- Effectively perform higher level internal service roles.
- Make a strong contribution to external service roles.

Level D

- Make a strong contribution to the governance and collegial life of the School, including successful mentoring of less experienced staff, and will show leadership in external activities.

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 Deputy Head of the School of Earth and Environmental Sciences.

SELECTION CRITERIA

- A PhD or equivalent in a relevant field of physical/chemical oceanography/ paleoceanography/ marine geology.
- Evidence of effective teaching practices and an ability to provide high level teaching and learning outcomes.
- Evidence of outstanding contributions to research, including peer-reviewed publications in leading journals.
- An ability to establish effective relationships and to represent and promote academic discipline at a university and wider community level, including industry, government and professional bodies.

Additional selection criteria for Level C and D

- Demonstrated capacity for independent research and international recognition, with a track record of experience as lead investigator.
- Evidence of ability to attract external research funds as lead investigator.
- Demonstrated experience in team-based and collaborative research and teaching, including with external agencies.
- Experience in teaching physical/chemical oceanography or marine geology courses at undergraduate and/or postgraduate levels resulting in continuous improvement of curriculum, development of teaching resources and implementation of innovative pedagogies that foster critical and strategic thinking.
- Active and effective record in principal supervision of higher degree by research students.

Additional selection criteria for Level D

- Demonstrated ability to mentor, support and supervisor staff in research or teaching activities.
- Demonstrated record of supervising Higher Degree by research student to completion as principal supervisor.
- Demonstrated capacity for management of a geochemistry laboratory complex that services both university staff and students and external clients.

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.