RECRUITMENT

ASSOCIATE RESEARCH FELLOW

CONTACT
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APPLICATIONS CLOSE ON FRIDAY 11 MAY 2018

Position description current from March 2018.

deaakin.edu.au/life-environmental-sciences
Deakin’s growing reputation is reflected in its rapid rise in international rankings; Deakin entered the prestigious Academic Ranking of World Universities for the first time in 2014 and now ranks an estimated 213 (AWRU 2017). Deakin is ranked 29 in the QS ranking of the world’s top universities under 50 years. Ninety percent of Deakin’s research was rated at or above world standards in the Australian Government’s Excellence in Research for Australia (ERA).

Established in 1974, Deakin University was named after the leader of the Australian Federation movement and the nation’s second Prime Minister, Alfred Deakin.

Deakin University has five campuses, one in Melbourne’s eastern suburbs, two in the port city of Geelong and one in Warrnambool on the south-west coast of Victoria. Deakin’s fastest growing campus is in the Cloud where over 14,000 students study predominantly online. All students, regardless of their campus or mode of study, benefit from Deakin’s award-winning digital environment.

Deakin is proud of its inclusive and student-focussed culture and its reputation for using innovative digital solutions to provide an engaging and personalised learning experience. Deakin is committed to lifelong learning, providing students with choices about how, when and where learning occurs.

Deakin’s four faculties offer courses across the arts, design, science, sport, nutrition, architecture, business, law, medicine, optometry, engineering, nursing, allied health, psychology and teaching.

With 58,000 students Deakin is one of Australia’s largest universities and is ranked in the top 2 per cent of the world’s universities in the major international rankings (ranked 29 in the QS ranking of the world’s universities under 50 year).

As a Victorian university with a global impact, Deakin is translating its research into the commercial outcomes that will drive the innovation Australia’s economy needs now and into the future. Research at Deakin focusses on innovation and robust partnerships with industry and business and it is building a formidable international reputation in areas of emerging national social, economic and political priority in its core areas of health, carbon fibre, energy and cyber security. Deakin has integrated its research growth plan into its overall strategy of service, developing its base in advanced manufacturing, which is vital for the Geelong community and Information technology, which is strong in the surrounds of its Melbourne campus.

OUR STRATEGY
Deakin’s vision and mission is articulated in its strategic plan LIVE the future: 2017-2020. Through LIVE the future, Deakin aspires to be Australia’s premier university in driving the digital frontier, enabling globally connected education for the jobs of the future, and research that makes a difference to the communities Deakin serves.

Informed by its Australian and Victorian context and engaged locally in the communities it serves, Deakin advances

Learning – offering students a brilliant education where they are and where they want to go
Ideas – making a difference through world-class innovation and research
Value – strengthening our communities, enabling our partners and enhancing our enterprise
Experience – delighting our students, our alumni, our staff and our friends.

These four interconnecting elements form the acronym LIVE, and together they articulate the Deakin promise to its students, staff, alumni, partners and friends.
The Faculty of Science, Engineering and Built Environment at Deakin University places great emphasis on excellence in its teaching and learning, research and research training, community engagement, and staff empowerment. We pride ourselves on our national and international activities and the partnerships we have formed with industry, community, government, and the professions.

The Faculty of Science, Engineering and Built Environment consists of four schools, each with a multi-discipline mix of teaching and research offerings and a strong emphasis on research excellence that informs our teaching programs.

**SCHOOL OF ARCHITECTURE AND BUILT ENVIRONMENT**
- Architecture
- Construction management
- Landscape architecture

**SCHOOL OF ENGINEERING**
- Civil
- Electrical and electronics
- Electrical and renewable energy
- Engineering Management
- Environmental Engineering
- Mechanical
- Mechatronics
- Mechanical Design

**SCHOOL OF INFORMATION TECHNOLOGY**
- Computer Science
- Creative technologies
- Cyber security
- Data analytics
- Software engineering
- Virtual reality

**SCHOOL OF LIFE AND ENVIRONMENTAL SCIENCES**
- Biological science
- Biomedical science
- Biotechnology
- Fisheries and aquaculture
- Forensic science
- Environmental management and sustainability
- Marine biology
- Science
- Sustainable regional development
- Wildlife and conservation biology
- Zoology and animal science.

The Faculty Executive includes the Executive Dean, the four Heads of School, the four Associate Deans (Teaching and Learning; International and Partnerships; Research; International Research Engagement), the Director of Research Partnerships, and the Faculty General Manager. Collectively, this leadership team establishes and delivers on the Faculty’s strategic activities.

**OUR MISSION**

Our mission is to prepare graduates for the careers of the future by harnessing emerging technologies to facilitate borderless, personalised education, and by conducting research that informs our practice and impacts the communities we serve.

Our undergraduate, postgraduate and doctoral degrees are informed by scholarship and are relevant to both national and global contemporary issues. Flexible learning strategies provide a distinctive student experience. The faculty’s teaching aims to be innovative, utilising face-to-face teaching and online technologies to ensure a high level of flexibility for the diverse learning needs of our students.

Our academic staff are engaged in both pure and applied research across their disciplines and are focused on issues which are of relevance to government, business and the community. To this end, we actively seek partnerships with relevant organisations, other like-minded universities and our alumni.

Our students come from diverse backgrounds and we value this diversity. Graduates are confident and competent in the use of online technology and are ready to make a significant contribution to the organisations they serve. They are highly valued by employers for both their knowledge and their graduate attributes.

We are committed to extending the boundaries of science, technology and design, achieving this through close relationships with professional associations, other education providers and universities, business, employers and government across Australia and internationally.
The School of Life and Environmental Sciences specialises in a wide range of disciplines and provides its graduates with a sound platform for the diverse employment opportunities that will exist in the future.

The school’s multidisciplinary nature is underpinned by a cluster of foundation disciplines comprising biology, chemistry, ecology, geography and earth science. This diversity of expertise allows us to offer a wide range of academic programs at both undergraduate and postgraduate level. Our courses are informed through active and ongoing research and industry connections and provide our students with work-integrated and industry-based learning experiences. Through these means, the school produces globally capable graduates with knowledge, skills and experience to gain employment related to their discipline.

Our internationally and nationally renowned academics and research staff are supported by constantly evolving technologies and state-of-the-art infrastructure. Often in collaboration with government departments, industry and leading international scientists, we deliver high quality research outcomes, from ‘blue sky’ discoveries to applied research and development tailored to industry, attracting over $4 million in funding each year. The School fosters a synergistic, collaborative and vibrant research culture, an outstanding research environment for early career researchers as well as world-class research facilities. The diversity and breadth of our academic expertise means that our research program can prioritise issues which are important for the future social, economic and environmental development and well-being of Australia and the world.

The School of Life and Environmental Sciences is the largest of four schools in the Faculty of Science, Engineering and Built Environment which, in turn, is the fastest growing faculty at Deakin University. The school has close associations with a number of Deakin’s strategic research centres – the Centre for Chemistry and Biotechnology (CCB), Centre for Integrative Ecology (CIE), Centre for Regional and Rural Futures (CeRRF) and Centre for Molecular and Medical Research (MMR).

Our mission is to produce well-informed and highly skilled graduates for the jobs of the future, and to conduct research that makes a positive difference to the communities we serve. By connecting people through education and research, we help to create a sustainable future.
The Associate Research Fellow will initiate and conduct research in the area of marine sediment and habitat dynamics. The position will join Deakin’s Marine Mapping team within the School of Life and Environmental Sciences and will bring the latest marine mapping techniques to Victoria to produce evidence-based predictions of sediment compartment dynamics.

RESEARCH ONLY LEVEL A

Level A members of staff typically perform these duties at the following levels:

RESEARCH AND SCHOLARSHIP

- Lead the shallow marine component of the shoreline system primarily using remotely sensed marine data from multibeam sonar and subbottom acoustic profiling supplemented with direct benthic habitat surveys from remote video observations and grab sampling.
- Initiate and conduct research under limited supervision either as a member of a team, or independently (where appropriate), to achieve the objectives of the DELWP, Sustainability Fund project, Improving coastal erosion assessments for Victoria.
- Contribute to building an active national and international research record, prepare findings for oral and written communication including publications and the generation of external research income.
- Effectively produce data, maintain data protocols and enter data into the appropriate research and government databases. Conduct preliminary data cleaning, screening and analysis.
- Constructively contribute to a vibrant research team, including participating with colleagues in developing and maintaining links and partnerships with industry and the wider community.
- Supporting and assisting with the successful application of scholarly and research expertise to innovation and invention, with appropriate involvement in the commercialisation of outcomes.
- Analyse marine sediment distribution around Victoria using existing multibeam datasets in order to delineate sediment compartments.
- Conduct new multibeam surveys to enhance the mapping coverage and characteristics of sediment compartments including the use of sub-bottom profiling data and defining relationships of sediment dynamics to benthic communities.
- Undertake marine surveys of the marine environment of Victoria.
- Conduct high level processing and analysis of remotely sensed marine data derived from ship and aerial platforms.
- Acquisition of high quality multibeam sonar and sub-bottom profiler data, including equipment setup, calibration and processing for mapping coastal compartments.
- Habitat characterisation with associated sedimentological and biological analysis.
POSITION PURPOSE
Along the shorelines of South-eastern Australia, there is concern that a lack of sediment supply, rising sea level and climate change will impact sediment circulation patterns, leading to the destabilization of nearshore-beach-dune systems through erosion, overwash, and backshore transgression. We aim to explore the fundamental interconnectedness that drives shoreline change in Victoria, Australia. Despite the acknowledgment of coastal sediment dynamics being critical to sustainable management knowledge of shoreline behaviour and sediment movement is limited. The determination of sediment volume, type, quantity (i.e. extent and thickness) and morphology will be important to better understand the coastal sediment budgets and shoreline evolution. As a result the Victorian Government, through the Department of Environment, Land, Water & Planning has formed a partnership with Deakin University and The University of Melbourne to develop the Victorian Coastal Monitoring Program. The aim of this program is to develop predictive models of future shoreline behavior through understanding sediment dynamics derived from the latest innovative technologies from multibeam and subbottom sonar mapping, citizen-science UAV/Drones and disciplines including remote sensing, marine sedimentology and habitat mapping.

ORGANISATIONAL CONTEXT
The Associate Research Fellow will reports to the Head of School through the Research Supervisor (Associate Professor in Marine Science).

ORGANISATIONAL RELATIONSHIPS
This position will work closely with staff associated with the Coastal Erosion Assessment project from both Deakin and Melbourne University in order to successfully fulfil the requirements of the role. They will build and maintain effective relationships, particularly with the Department of Environment, Land, Water and Planning (DELWP) whom this project is affiliated with.

POSITION LOCATION
The primary location is the Warrnambool Campus, with travel to other campuses and field locations.

PROBATIONARY PERIOD
A 24 month probation period will apply.

THE SUCCESSFUL CANDIDATE – ESSENTIAL SELECTION CRITERIA

Qualifications
- PhD degree in marine geoscience or biology or related field with a substantial research component.

Experience, Knowledge and Skills

Research
- Demonstrated ability to plan, initiate and conduct high quality research, which has resulted in publications, conference papers, reports, or professional or technical contributions, which give evidence of research ability.
- Experience with a range of shallow marine geophysical techniques such as multibeam surveying and sub bottom profiling, including equipment setup, calibration and processing for benthic characterisation.
- An excellent track record of peer-reviewed publications (relative to opportunity) in international journals in marine benthic characterisation that complements the existing researchers and research priorities of Deakin’s marine mapping group.
- Demonstrated ability to work effectively as a member of an interdisciplinary team.
- Demonstrated ability to plan and conduct high quality research and produce academic outputs.
- Demonstrated organisational skills including the demonstrated ability to maintain a high standard of laboratory and data record keeping and a demonstrated ability to meet competing deadlines.
- Demonstrated ability to liaise with (and or negotiate with) research clients and Government.
- Good interpersonal skills, including the ability to interact well with research and technical staff and students and excellent oral, written communication and presentation skills.

Personal Qualities
- Interpersonal skills that support the ability to establish and maintain highly effective working relationships with a diverse range of people.
- Ability to adapt to changes in the environment and effectively meets new challenges.
- Commitment to the University’s Mission, Core Commitments and Values which include - excellence, academic freedom, collegiality, continuous improvement, ethical behaviour, accountability and environmental responsibility.

SELECTION CRITERIA - DESIRABLE
- Experience in electronics and signal processing in underwater instrumentation.
- SSSI/AHSCP-1 hydrographic survey certification or equivalent.
- Demonstrated ability to meet competing deadlines.
- Demonstrated organisational and project management skills, including the ability to work in diverse and complex environment in a multi-disciplinary team with limited supervision.

PERFORMANCE EXPECTATIONS
Annual performance objectives and expected outcomes will be defined for this role in accordance with the Minimum Standards and Typical Duties for Academic Levels (MSTDALs) and Faculty Research Expectation Models (FREMs). Specific duties will be allocated with reference to the applicable Workload Allocation Model (WAM). These documents are updated from time to time and are available on request.

deakin.edu.au/life-environmental-sciences
APPLICATION

Thank you for your interest in the position of Associate Research Fellow.

HOW TO APPLY

Please apply online via: deakin.edu.au/about-deakin/careers-at-deakin
Include cover letter, curriculum vitae and a response to the Selection Criteria.
Please quote reference number: 180219

SUPPORT FOR YOUR APPLICATION

All enquiries will be confidential and should be directed to:
Associate Professor Daniel Ierodiaconou
Associate Professor in Marine Science
+61 3 5563 3224
daniel.ierodiaconou@deakin.edu.au

CLOSING DATE FOR APPLICATIONS

11 May 2018

INTERVIEW PROCESS

Short-listed candidates will be interviewed by a panel of esteemed colleagues.
Details of professional referees will be requested prior to the interview.

REMUNERATION AND BENEFITS

An attractive remuneration package is offered.
This will include:
Base salary Level A $67,562-$90,827
17% Superannuation
Total Rewards at Deakin

TERM OF APPOINTMENT

Full time and fixed term for 3 years.

SPECIAL REQUIREMENT

• A valid Victorian drivers licence (or obtain within 3 months)
• Undertake marine-based research aboard small vessels on the open coast of Victoria.

Deakin University values diversity, enables access and promotes inclusion. Deakin University is an employer of choice for women and strongly encourages applications from Aboriginal and Torres Strait Islander people.
Deakin has four campuses, one in Burwood, two in Geelong (Waterfront and Waurn Ponds) and one in Warrnambool. It also has corporate centres in Melbourne CBD, Burwood and Geelong, a network of technology-rich learning centres across regional Victoria and international offices in India, China and Indonesia.

Melbourne has been named the world’s most liveable city for the fifth year running*

Further information regarding our locations and relocating to Victoria can be found here:
- Our locations
- Considering Relocation

*The Economist’s annual study

**WARRNAMBOOL CAMPUS**

Deakin’s Warrnambool Campus is set on the banks of the picturesque Hopkins River, close to local surf beaches and popular tourist attractions. The Warrnambool Campus is a friendly, close-knit community, with a personal and informal relationship between staff and the students who study there.