

RECRUITMENT

Post-Doctoral Research Fellow: Organic Amendment Irrigated Farming Systems



CONTACT

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Applications close on Friday 21 July, 2019

About Deakin

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 211 (ARWU 2018). Deakin is ranked 31 in the QS ranking of the world's top universities under 50 years.

Top
1%
of the world's
universities

No. 1
In Victoria for
student satisfaction
2010-2017

No. 211
ARWU global ranking
of world universities'
research capabilities

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 15 000 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-focused 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 prides itself on developing career-ready graduates, innovative, resilient, and well prepared for rapidly changing workforce needs. Deakin has a strong focus on teaching, with student satisfaction and the employability of its students, key indicators of success. Deakin ranks first in Victoria for student satisfaction (SES) and graduate employability (GOS).

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 almost 62 000 students Deakin is one of Australia's largest universities and is ranked in the top 1% of the world's universities (ARWU 2018).

As an Australian 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, sport, carbon fibre, energy and cyber security. Deakin's manufacturing innovation precinct provides an important link between technological innovation and successful industry outcomes, strengthening and streamlining pathways for commercial research.

Our strategy

Deakin's vision and mission is articulated in its strategic plan *LIVE the future: Agenda 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.



FACULTY OF SCIENCE, ENGINEERING AND BUILT ENVIRONMENT

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 science
- Software engineering
- Virtual reality
- Mathematics

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.

Deakin's Promise to Equity, Diversity and Inclusion

At Deakin we value diversity, embrace difference and nurture a connected, safe and respectful community. We recognise that our academic workforce is increasingly diverse with a variety of backgrounds, experiences and responsibilities. In many cases, academic careers can be put on hold through career breaks or part-time work arrangements to take on caring duties, gain experience in other industries, for medical reasons or other personal circumstances.

Achievement relative to opportunity places more emphasis on the quality as opposed to the quantity of research outputs. In your application, we encourage you to comment on your achievements relative to opportunity.

Deakin Centre for Regional and Rural Futures

The Centre for Regional and Rural Futures (CeRRF) delivers innovative research solutions to regional and rural communities by collaborating with industry, government, community and not-for-profit sectors. CeRRF contributes to the design of smarter technologies to enhance regional and rural productivity.

CERRF is unique in the Australian context as it has the capability and capacity to address regional and rural productivity problems with teams from engineering, science, business, economics and the humanities. The Centre focuses on bridging the gaps between regional enterprises, governments and academia. With significant investment in cutting edge facilities and fitted with state-of-the-art equipment, CeRRF will be positioned as the premier centre for regional research and produce the best innovations that will positively impact rural communities here and around the world.

At CeRRF, we nurture the development of our researchers to encourage meaningful interaction with partners across the government, industry and community sectors.

CeRRF focus on understanding our customer needs to ensure our research remains relevant and produces high-value outcomes. Our work ranges from designing smarter technologies for increased productivity and sustainability to developing regional competitiveness. By being multidisciplinary, CeRRF have the flexibility to look at problems from different angles, to achieve the desired industry solutions. These factors make CeRRF unique in the regional and rural research space.



Post-Doctoral Research Fellow: Organic Amendments in Irrigated Farming Systems

The Post-Doctoral Research Fellow (PDRF) will initiate and conduct applied research in soil fertility and crop nutrient and water management with a focus on optimising the integrated use of animal manures and mineral fertilizers in high yielding irrigated Australian farming systems. S/he will undertake field and lab trials, to validate the productivity, economic and environmental benefits using soil health parameters, soil water, greenhouse gas emissions and crop monitoring to investigate real-world commercial crop management scenarios that will underpin decision support systems for government and industry stakeholders.

The PDRF will publish in high-quality international journals, industry literature and contribute to an Australian Federally funded

project “Unlocking the true value of organic soil amendments”, which will contribute to the Smart Farming Partnerships outcomes through the National Landcare Programme. S/he will also be expected to collaborate with national researchers and other industry based project partners.

The PDRF will undertake limited postgraduate teaching and administrative responsibilities, by co-supervising PhD and Honours students, and any research assistants. S/he will also contribute to irrigation group meetings, and other activities within the Centre for Regional and Rural Futures.

The project

The Project is funded by a National Landcare Project between Deakin University, Queensland University Technology, La Trobe University, University of Queensland, Irrigation Research Extension Committee (IREC),

Meat and Livestock Australia (MLA), Office Environment and Heritage, Green Industries SA, Sustainability Victoria

RESEARCH ONLY LEVEL A

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

Research and Scholarship

- Supporting and assisting with research, scholarship or creative activity
- Supporting and assisting with research projects, collaborations and partnerships
- Initiate and conduct research under limited supervision either as a member of a team, or independently (where appropriate), to achieve the project objectives
- Personally, and through active participation in teams, prepare and develop grant applications and research proposal submissions to external funding bodies
- Contribute to a vibrant research team, including participating with colleagues in developing and maintaining links and partnerships with industry and the wider community

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.



- Supporting and assisting with the successful application of scholarly and research expertise to innovation and invention, with appropriate involvement in the commercialisation of outcomes
- Supervising or examining honours students, or making a contribution to the supervision, management and timely completion of HDR students
- Contribute to building an active national research record, prepare findings for oral and written communication including publications and the generation of external research income
- Developing an early career research plan
- Contributing to the successful application of scholarly and research expertise to innovation and invention, with appropriate involvement in the commercialisation of outcomes

ORGANISATIONAL RELATIONSHIPS

The appointee will be actively involved in applied research related activities. The PDRF reports to the Director of the Centre for Regional and Rural Futures through the Research Supervisor (Wendy Quayle).

ORGANISATIONAL CONTEXT

The appointee will be based in CeRRF located at the Griffith, NSW research group. They will work with support, guidance and /or direction from research only classified at Research Fellow (Level B) and above and with an increasing degree of autonomy as the researcher gains greater skills and experience.

SELECTION CRITERIA- ESSENTIAL

QUALIFICATIONS

- PhD in plant-soil organic matter-water interactions, soil nutrition, or a related discipline obtained within the last 5 years.

RESEARCH

- Good project management and advanced research methods of at least three areas out of soil quality, agronomy, soil physics-organic interactions, soil-plant water field monitoring, soil N/P crop nutrition, data analytics, soil-atmosphere greenhouse gas measurement.
- Demonstrated knowledge and experience of field based experimentation in agricultural environments.
- Demonstrated originality, creativity and innovation in problem solving and introducing new directions and approaches.
- Demonstrated ability to conduct research in industry projects with a high degree of applied science and industry focussed research.
- Demonstrated skills in the publication of research journal articles, conference papers, industry literature articles.
- Evidence of high quality peer reviewed publications in international journals.
- Demonstrated ability to support the development of research grant applications.
- Ability to conduct high-quality research individually and collaboratively as a member of a research team.

OTHER

- Experience in contributing to the supervision of undergraduate honours and / or research higher degree students
- Evidence of excellent oral, written communication and presentation skills
- Demonstrated organisational skills including the ability to demonstrate scientific rigour and maintain a high stand of laboratory and data record keeping

PERSONAL QUALITIES

- Interpersonal skills that support the ability to establish and maintain highly effective working relationships with a diverse range

of people including farmers, irrigation industry stakeholders and extension workers, collaborating researchers, students, the staff of the Faculty and School and with other members of the University.

- Ability to adapt to changes in the environment and effectively meet 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



Appointment process and how to apply

Application

Thank you for your interest in the position of Post Doctoral Research Fellow: Organic Amendments in Irrigated Farming Systems.

Please direct all correspondence and enquiries to;

Wendy Quayle
Senior Research Fellow
+61 2 69696904
w.quayle@deakin.edu.au

How to apply

Please apply online via:

deakin.edu.au/about-deakin/work-atdeakin

Include cover letter, curriculum vitae and a response to the Selection Criteria.

Please quote reference number:

494369

Interview process

An initial screening of prospective candidates will take place.

Short-listed candidates will be interviewed by a panel of esteemed colleagues.

Details of professional referees will be required prior to interview.

Remuneration and benefits

An attractive remuneration package is offered. Salary will be commensurate with qualifications, experience and research record.

Relocation support may also be available.

Term of appointment

Appointment is for a fixed term position which is subject to an initial 6 month probationary period.

Special Requirement/s

This role has been identified as having contact with children and requires the incumbent to apply for and maintain a Working With Children Check (refer to Deakin's Recruitment Procedure for further details).



Our locations

Deakin has five campuses, one in **Burwood**, two in Geelong (**Waterfront** and **Waurm Ponds**), one in **Warrnambool** and the vibrant Cloud Campus where over 25% of our students study. All students, regardless of their campus or mode of study, benefit from Deakin's award-winning digital environment.

Melbourne has been named the worlds' most liveable city for more than 5 years running*.

Further information regarding our locations and relocating to Victoria can be found here:

[Our locations](#)

[Considering Relocation](#)

[Melbourne timelapse](#)

[Geelong/SurfCoast timelapse](#)

**The Economist's annual study*

MELBOURNE BURWOOD CAMPUS

Melbourne Burwood Campus is Deakin's thriving metropolitan campus, attracting over 32,000 undergraduate and postgraduate on-campus students. It boasts open and inviting spaces for socialising and studying, innovative architecture, spacious new buildings and wireless hotspots.

GEELONG WATERFRONT CAMPUS

Geelong Waterfront Campus is located on beautiful Corio Bay, in the central business district of Geelong. Originally built as Woolstores in 1893, the buildings have been extensively renovated to create a modern and impressive campus centre for over 5,000 students.

GEELONG WAURN PONDS CAMPUS

Geelong Waurm Ponds Campus is located on the western edge of Geelong and is a thriving regional campus attracting over 8,000 undergraduate and postgraduate on-campus students. It boasts open and inviting spaces for socialising and studying, innovative architecture, spacious new buildings and wireless hotspots. The campus features expansive landscaped grounds and extensive sporting facilities.

WARRNAMBOOL CAMPUS

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.

