THE UNIVERSITY of ADELAIDE

Information for Candidates

# Associate Professor / Professor in Mechanical Engineering

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# Contents



# Message from the Vice-Chancellor and President

**I am delighted that you are considering a career with the University of Adelaide.**

The decade commencing in 2013 will take the University of Adelaide to the eve of its 150th anniversary, and marks the beginning of a new period of strategic re-assertion of the distinctive University of Adelaide experience. The new Strategic Plan, *Beacon of Enlightenment*, sets out to recapture the vision of the University's founder, its first Vice-Chancellor Dr Augustus Short.

In a rapidly changing environment, the University of Adelaide is clear about its goals and intentions—we are an international institution that embraces the ideal of the research university, where the union of teaching and research, combined in a search for impartial truth is fundamental; where the small group learning experience is supported by the innovative use of flexible learning technologies; and the ground-breaking work of our world-class researchers crosses disciplinary boundaries to creatively address the world's great problems.

This vision needs imaginative, skilled people to support it.

Our bold new agenda will be underpinned by responsive services and productive partnerships. Over the coming decade, the University of Adelaide will undertake a transformational journey in which the quality and dedication of our people, the strategic use of our technology resources, and the clarity of our vision will determine what kind of university we will be by our sesquicentenary.

I hope you are inspired by our vision, and the opportunity to join us in our quest to become Australia's most distinctive university.

Professor Warren Bebbington
Vice-Chancellor and President

# About the University of Adelaide

Established in 1874, it is Australia's third oldest university with a strong reputation for research and teaching excellence.

The University of Adelaide is one of Australia's leading research-intensive universities, a valued member of Australia's Group of Eight and is consistently ranked among the top 1% of universities in the world. It ranked in the top 100 universities worldwide in the QS World University Rankings 2014 and in the top 200 in the prestigious Academic Ranking of World Universities (ARWU) 2014.

## The history of a progressive institution

From its early beginnings the University was a progressive institution. It was founded with a noble goal: to prepare for South Australia young leaders shaped by education rather than by birth or wealth. The University would also be secular: there would be no church-owned residential colleges on campus. Adelaide's spirit would be of liberty and discovery, immune from intolerance or external influence.

And so the founding vision was determined. The University of Adelaide would become a leader in social reform and responsible for many 'firsts'. The University was the first university in Australia, and only the second in the world, to grant degrees to women. This was forty years before Oxford. Graduate Helen Mayo (MBBS, 1902) became the first woman elected to a University Council in Australia. Graduate Dame Roma Mitchell LLB (1934) maintained a distinguished career with the following achievements: Australia's first woman judge, Queens Council, University Chancellor, and Governor of an Australian state.

Over the course of its history, the University has also been a pioneer in many disciplines, specifically, in the teaching of science. The institution was the first in Australia to develop a science degree. This leadership in science continues today as the University's research outputs are considered world leading in many scientific fields.

The University has also had a history of leadership in the arts and humanities. This began with the Bachelor of Arts; the first degree offered by the University over 136 years ago. Adelaide then became the first university in Australia to establish a Chair of Music, and the Elder Conservatorium of Music was the first Australian tertiary based music school. More recently, the University created the first Australian Chair in Creative Writing.

Over its history, the University has produced 106 Rhodes Scholars, including Australia's first Indigenous recipient in 2010, Rebecca Richards, and 122 Fulbright Scholars. There are five Nobel Laureates among its alumni community.

Today the University of Adelaide draws strength from its founding values as it fulfills its future research and teaching aspirations.

## Today's Mission

The University is an international institution that distinctively embraces the ideal of the research university, where the excitement, vitality and passion of the search for new knowledge is one in which all students participate; as an enlightened and tolerant community where able students can find support, whatever their background or circumstances; and as a place where the Kaurna people, original custodians of the land on which the campuses now rest, are acknowledged and their culture respected.

## Learning and Teaching

The University of Adelaide offers a broad range of undergraduate and postgraduate programs underpinned by world-class research. It provides education in the disciplines of sciences; health sciences including medicine, dentistry and psychology; the arts and humanities; engineering, mathematics and computer sciences; and professions such as teaching and law.

It places high priority on the student learning experience. It has a vibrant campus lifestyle with more than 25,000 students, of which 30 percent are international students from more than 90 countries. It also facilitates a strong internationalisation program encouraging and enabling local students to study overseas as part of their degrees.

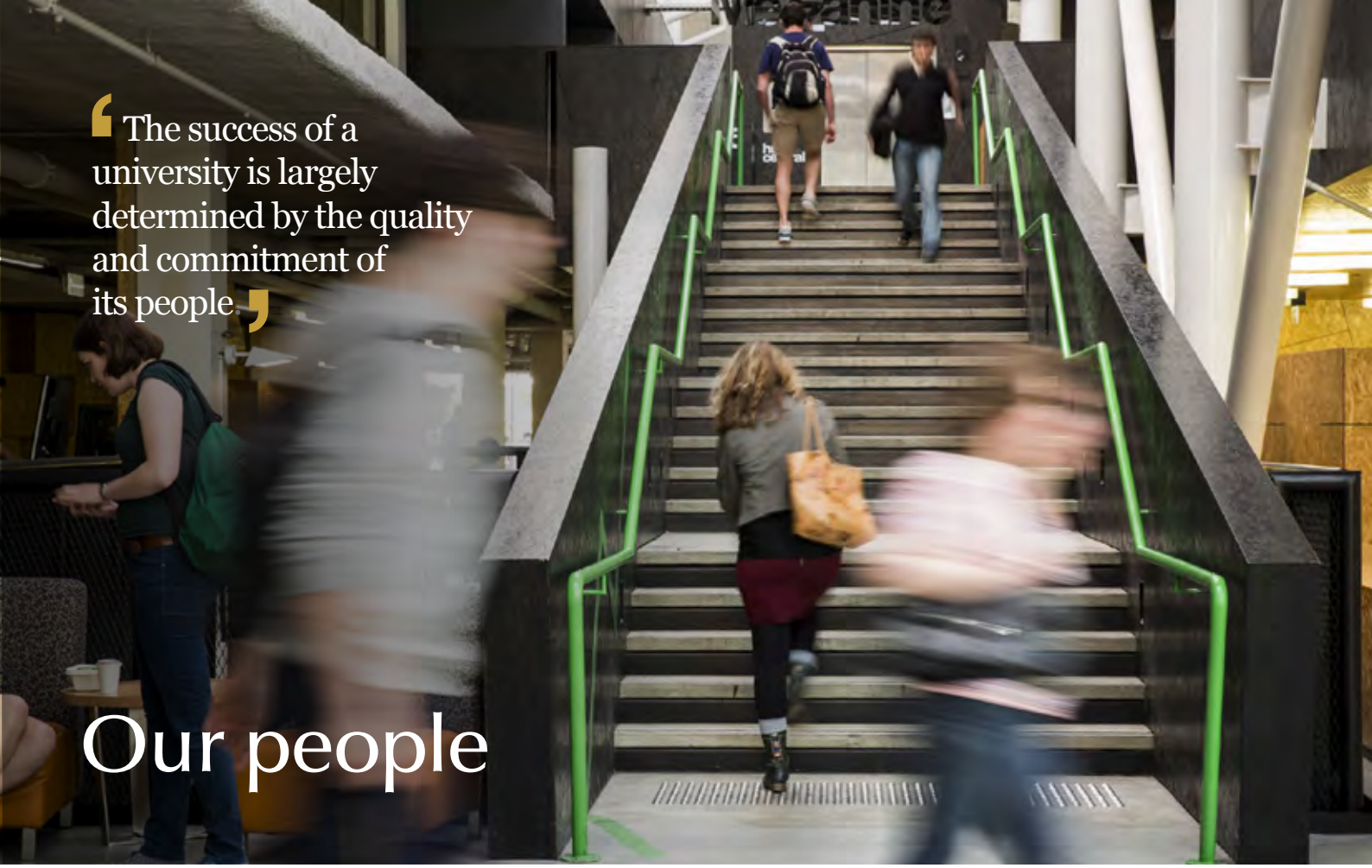
## Research

Key research foci at the University reflect national and global research priorities in the areas of agriculture, the environment, health, minerals and energy, photonics and advanced sensing. Other areas of strength include biological sciences, creative arts, information technology and physical, chemical, social and behavioural sciences.

The 2012 Excellence in Research for Australia (ERA) results released in December, confirm the University of Adelaide as the research leader in South Australia. The University achieved 18 of the 23 top sub-discipline ratings awarded in the state. Additionally, its number of '5' ratings—classed as 'well above world standard' increased to 18 and its number of '4' ratings—classed as 'above world standard' also rose to 21.

The University's research institutes aligned well with ERA high performers. The following areas all scored the highest possible rating:

- optical physics (Institute for Photonics and Advanced Sensing)
- horticultural production (Waite Research Institute)
- geology (Institute for Mineral and Energy Resources)
- paediatrics and reproductive medicine (Robinson Institute)
- evolutionary biology (Environment Institute).



> The success of a university is largely determined by the quality and commitment of its people

# Our people

Those who work at the University of Adelaide are part of a rich tradition of excellence in education and research. All staff – academic and professional – believe in the power of education and contribute to the University's goal of educating the future leaders of tomorrow.

Currently over 3000 full-time equivalent staff are employed across academic and professional roles. This constitutes a vibrant community renowned for its commitment, energy and enthusiasm.

All staff enjoy excellent working conditions, with most employed under the University's Collective Agreement. The University of Adelaide promotes equity and diversity, supports career-life balance, and encourages lifelong learning through development opportunities.

Our new Associate Professor / Professor of Mechanical Engineering will be joining a forward-looking, dynamic university with a strong international focus, and a strong commitment to the state and to the nation. Learning, research and scholarship are highly valued and promoted, resulting in quality programs and graduates of the highest calibre, who contribute extensively to their local communities and the world at large.

## Organisational units

### The University of Adelaide is organised into five academic faculties and four administrative divisions.

### Administration

There are four administrative divisions:

- Vice-Chancellor and President
- Deputy Vice-Chancellor and Vice-President (Research)
- Deputy Vice-Chancellor and Vice-President (Academic)
- Vice-President (Services and Resources)

### Faculties

There are five faculties, each of which is managed by an Executive Dean:

- Faculty of Engineering, Computer and Mathematical Sciences
- Faculty of Health Sciences
- Faculty of Humanities and Social Sciences
- Faculty of the Professions
- Faculty of Sciences.

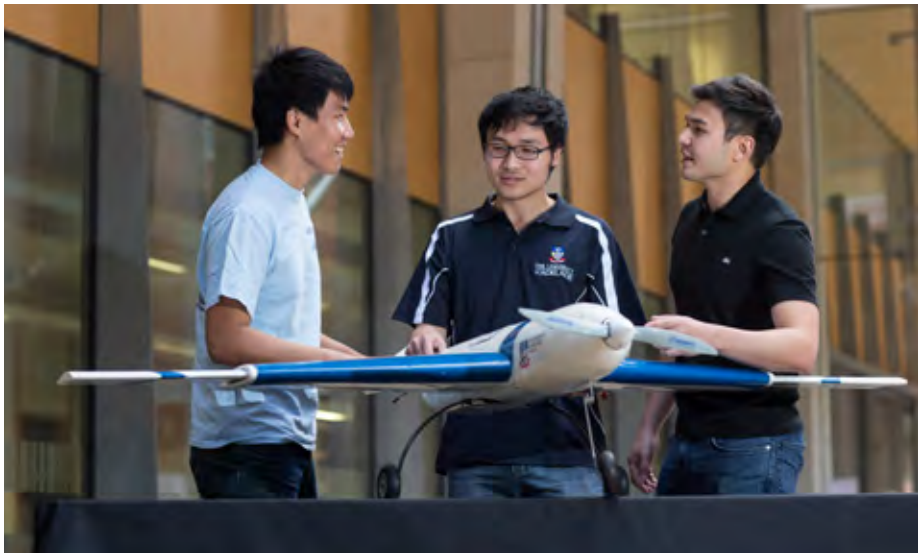
### Campuses

The University constitutes four campuses: Adelaide (North Terrace), Waite, Roseworthy and Thebarton.

The Associate Professor / Professor in Mechanical Engineering will be based at North Terrace campus. With significant heritage properties and iconic architecture, the main campus located on North Terrace in Adelaide forms part of the city's cultural promenade and is surrounded by South Australia's art gallery, museum and library. It is the primary location of undergraduate teaching and the base for a broad range of research. The campus provides a mix of the historical and the contemporary, combining grand old sandstone buildings with state-of-the-art teaching, learning and research facilities.

# About the Faculty of Engineering, Computer and Mathematical Sciences

Delivering world-class education in an environment that pursues excellence and discovery, the Faculty of Engineering, Computer and Mathematical Sciences (ECMS) is committed to producing independent, educated leaders through quality teaching informed by innovative research and strong industry connections.



With passionate leaders at the cutting-edge of their disciplines and strong links with international universities and other external organisations, financial institutions and government research organisations, the faculty's teaching programs are strengthened with content relevant to current industry needs.

From clean power generation to state-of-the-art computer chips, our academics work in conjunction with industry partners to design innovative and sustainable technologies for future generations. Their involvement in real-world research and consulting brings a unique authority to the teaching of our degrees.

With a vibrant and progressive campus community set against a blended backdrop of modern infrastructure and traditional sandstone buildings in the cultural heart of the city, the faculty hosts modern, purpose-built teaching and learning facilities that are among the best in the country.

Home to the Faculty of ECMS, the six star green star rated Ingkarni Wardli building features world-class and well-appointed amenities that facilitate small group learning and engage students in their pursuit of knowledge.

The Faculty of ECMS comprises seven schools:

- Australian School of Petroleum
- Chemical Engineering
- Civil, Environmental and Mining Engineering
- Computer Science
- Electrical and Electronic Engineering
- Mathematical Sciences
- Mechanical Engineering

## Faculty Research

The Faculty of ECMS has a fine reputation for innovative research across a wide range of fields. Engineering and Computer Science both ranked in the top 150 of universities worldwide in the prestigious Academic Ranking of World Universities (ARWU) 2014.

# The School of Mechanical Engineering

With an outstanding reputation for teaching, research and the quality of its graduates, the School of Mechanical Engineering is proud of its long-standing tradition of quality student education.

Underpinned by world-leading research and a vibrant, innovative environment that facilitates knowledge generation and technology development, the School of Mechanical Engineering equips graduates with the necessary tools to push the boundaries of modern technology and make a profound impact on the world.

Undertaking a range of 'blue-sky' and applied research, the School has developed many new and innovative technologies that have made an impact throughout the world. Research is conducted across a diverse and wide range of areas including thermo-fluids, materials and structures, acoustics and vibrations, robotics and control, biomechanical engineering, and the application areas of energy, aerospace, sports, mechatronics, sustainability, marine engineering, aerodynamic design, assistive technologies and humanitarian engineering. Highly skilled technical staff and fully equipped instrumentation, electronics and mechanical workshops support the sophisticated facilities and equipment necessary to sustain the research activities of the School.

## Our programs

The School of Mechanical Engineering offers a range of undergraduate and postgraduate coursework degrees across a broad range of discipline areas:

**Undergraduate degrees:**

- Bachelor of Engineering (Mechanical)
- Bachelor of Engineering (Mechanical and Aerospace)
- Bachelor of Engineering (Mechanical and Sports)
- Bachelor of Engineering (Mechanical and Sustainable Energy)
- Bachelor of Engineering (Mechatronic)
- Double degrees are also offered with Arts, Mathematics, Computer Science, Finance, Science and Petroleum Engineering.

**Postgraduate coursework degrees:**

- Master of Engineering (Mechanical)
- Master of Engineering (Aerospace)
- Master of Engineering (Mechatronic)
- Master of Marine Engineering
- Graduate Diploma in Marine Engineering
- Graduate Certificate in Marine Engineering

## Research groups within the School

### Acoustics and Vibration

The aim of the group is to undertake fundamental and applied research in noise and vibration control. The group has diversified research interests including dynamics and control, ultrasound, vibration isolation, condition monitoring, thermoacoustics, psychoacoustics, vibro-acoustics, underwater acoustics, noise control and magnetics.

### Aerospace

The Aerospace Research Group focuses on fundamental and applied research in a wide range of aeronautics, fluid mechanics, aerodynamics and space related topics. Topics include the application of composite materials to aerospace structures, fixed-wing and rotary-wing platforms, numerical simulation, aeroacoustics, unmanned air vehicle design, flapping motion and morphing wing, hypersonic vehicles, pulse jet and rocket engines, satellite control and stability, aircraft control and stability, plasma aerodynamics and magneto hydrodynamics.

## Flow and noise

The Flow and Noise Group has a strong focus on computational and experimental aeroacoustics. We also have expertise in the area of hypersonic systems, flight dynamics and control.

## Aerodynamic Design

The School has a strong track record in aerodynamic design with the generation of new knowledge, numerous patents and technologies that have been prominent on the world stage, from the Sydney 2000 Olympics to the 2014 Tour de France. Recent examples include: aerodynamically-optimised burners used in the cement industry and Olympic flames; aerodynamic agglomerators for removal of fine dust particles from flue gas; quiet, efficient foils for application in turning vanes, fan blades and wind turbine blades; low-drag road and track cycling helmets and components development for professional and Olympic cycling teams and sporting-goods companies; and the performance prediction of experimental analysis of the aerodynamics of sports balls and sports fabrics.

## Robotics and Control

The robotics group conducts research in fields including nanopositioning, field robotics and bio-inspired robotics, drawing on expertise mechatronics, sensor and actuator technologies, artificial intelligence and machine learning. Applications include precision agriculture, remote sensing and automation, assistive robotics, biomedical robots and resource management.

## Centre for Energy Technology

The aim of the CET is to accelerate the national and international transition from a high to low CO2 emission society through world-leading research and development activities relating to cost-effective clean energy technologies. The Centre for Energy Technology has become internationally regarded for its outstanding and innovative research in solar-thermal-combustion hybrids, in alternative fuels, in clean combustion, in wind/ocean power and in energy storage. With more than $20m in leading research infrastructure and an annual budget of some $8m in external funding, the CET generates some 100 publications per year in leading international journals. Harnessing the capability of some 40 research staff and 50 HDR students from Mechanical, Chemical and Electrical Engineering and from Chemistry and Economics, the Centre provides capacity to address big challenges. The CET is leading the Value Add node of the $60m Australian Solar Thermal Research Initiative, addressing solar fuels.

## Structures and Materials

The multidisciplinary Structures and Materials Group has research interests in fundamental and applied research in materials, welding, biomaterials, surface coatings, corrosion and fracture mechanics. The School is a partner in the Energy Pipelines CRC which was established in January 2010 to undertake research and education of relevance to the energy pipeline industry in Australia. Additional industry research links include the defence sector (marine platforms), bio-engineering (bone fracture mechanics), resources (oil recovery), manufacturing (sintering of carbides) and new surface films.

## Biomechanical Engineering

Sports Engineering is an ambitious new program, and an Australian first, that combines mechanical engineering, physiology, bio-mechanical and sports engineering subjects to develop new technologies for sporting applications. Research strengths in the area of biomechanical engineering include 3-dimensional modelling and analysis of motion, finite element analysis of biological materials and the mechanics of bone and soft tissue. With collaborative links with SA Pathology and Orthopaedic surgeons the School is ideally placed to develop and expand this exciting area of research.

## Assistive Technologies

The Assistive Technologies Research and Innovation Group (ATRIG) was established in 2014 as a strategic initiative of the School of Mechanical Engineering. It is a specialist interdisciplinary group committed to the development of breakthrough technology platforms and their application in innovative systems and devices that address the medical, health and wellbeing needs of the ageing and disabled. The group comprises leading researchers from a variety of disciplines including; mechanical engineering, mechatronics, computer sciences, electronics, material sciences, health and medical sciences, and social sciences.

## Humanitarian Engineering

The research conducted in the Humanitarian Technology Research Group utilises the University's world-class capabilities in engineering in order to help solve some of the world's greatest challenges. Our team comes from very strong backgrounds in fluid mechanics, combustion and laser diagnostics and are dedicated to producing meaningful results. Our current research includes investigations into emissions reductions in cookstoves, development of solar radiation based water treatment systems, designs for wind power generation and biodigesting toilets.

## The School at a glance

| | |
|---|---|
| 27 | Academic staff |
| 6 | Administrative staff |
| 14 | Workshop and computing staff |
| 15 | Postdoctoral researchers |
| 90 | Higher degree by research (PhD and Masters) students |
| 70+ | Higher degree by coursework students |
| 1100+ | Total undergraduates |
| 189 | International undergraduates |
| $26m | Total School budget |

## Research facilities

- Anechoic and reverberation acoustic test chambers
- Engine test cells
- Combustion facilities and laser diagnostic instrumentation, including a $4.5m laser diagnostics facility with unique capability world-wide in measurement of turbulent flames with soot, two phase flows and solar-irradiated flows
- Comprehensive inventory of noise and vibration test equipment for in-house and field testing
- Computational engineering - fluid dynamics, stress analysis, acoustics, vibration

- Powerful computing network
- Biomechanical engineering lab including 18 camera 3D motion analysis system, high speed camera and thermal imaging systems, a high speed treadmill, an instrumented Wattbike and instrumentation for measurement and analysis of forces, oxygen and EMG signals
- Fully equipped mechanical workshop including a CNC lathe and CNC vertical mills
- Specialised welding equipment for research
- Tensile/compressive testing machines
- A wide range of autonomous platforms including off-road ground vehicles, underwater vehicles, surface boats, quadcopters and fixed wing aircraft
- Cage-free precision robot arm
- 3D scanning laser vibrometer
- Corrosion and Stress Corrosion Cracking laboratories
- Metallographic and Optical Microscopy laboratories
- More than $6m of wind and water flow facilities, including the $5m Adelaide Wind Tunnel, which is the only industrial-scale wind tunnel in South Australia, and the second largest wind tunnel in Australia. This research facility has been designed and built by the University of Adelaide with the support of the Sir Ross & Sir Keith Smith Fund and the South Australian Government.
- Water channel and small-scale wind tunnels equipped with Cobra probes, hot-wire anemometry, force and pressure measurement systems
- Laser-based flow visualisation and velocity measurement systems including LDA and PIV

## Research funding and key partners

Annual research revenue to the School is currently around $3.5m. Recent funding successes for projects led by School staff, range from fundamental to applied research. Fundamental research funded by the Australian Research Council (ARC) Discovery program includes:

- **$A750,000** for a three-year project on "Investigation of the coupled dependence of concentrated solar radiation and combustion in a novel solar hybrid technology";
- **$A500,000** over three years for "Quantifying the impact of wind farm noise on rural communities";
- **$A320,000** over three years on "Resolving the mechanics of turbulent noise production";
- **$A300,000** over three years on the "Mechanisms of sound absorption at the nanoscale", with partner investigators from (CSIRO);
- **$A360,000** over three years for "Enhanced mixing of turbulent jet flames via side lateral injection";
- **$A650,000** over three years for "New understanding of turbulent flames with soot and particulate fuels";
- **$A612,000** over three years for "New understanding and models for two-phase solar thermal hybrid reactors"; and
- **$A400,000** for "Development of a world-class facility for three dimensional dynamic testing".

The Australian Solar Thermal Research Initiative (ASTRI) Solar Fuels Project provides funding for a research program in concentrating solar power (CSP) across a number of Australian institutions, including the University of Adelaide. Funding of $4,600,000 over eight years has been provided to the Schools of Mechanical Engineering & Chemical Engineering. The ASTRI collaborating institutions are CSIRO, Australian National University, the University of Queensland, Queensland University of Technology, University of South Australia and Flinders University, plus collaborators from the United States, Arizona State University, National Renewable Energy Laboratory (NREL) and Sandia National Laboratories.

The School's research also includes collaboration with industry, with funding from the ARC Linkage program for the following projects:

- "Ultrasound for the control of cyanobacteria", with SA Water and other water authorities, **$400,000** plus significant cash and in-kind contributions from the industry partners;
- "Understanding and predicting submarine hydrofoil noise", Deep Blue Tech Ltd, **$420,000+**, with partner investigators from the Australian Defence Science and Technology Organisation (DSTO);
- "Novel vibro-acoustic technologies for detecting bearing and wheel defects in rail vehicles", Trackside Intelligence, **$610,000+**; and
- "Oscillating water column efficiency improvement through impedance matching and active latching control techniques", Carnegie Wave Energy Limited, **$259,000**.

Further, the recent DSTO funded Capability Technology Demonstrator (CTD) projects include "Adaptive tuned mass damper for submarine engines", $530,000, "Adaptive exhaust silencer for submarine engines", $1,120,000, and "Active exhaust silencer for submarine engines", $2,880,000.

The South Australian Government's ClevergreenTM Eco-Innovation Program has awarded $100,000 to a wine consortium of Yalumba winery and Tarac Technologies to develop a solar vacuum heat pipe collector (SVHPC) through a feasibility study being led by staff from the School. The study will develop a concept design of a SVHPC system to provide hot water for cleaning for a typical winery and evaluate the economic, energy and environmental benefits.

Energy Pipelines CRC funding of $550,000 in total has been awarded for the projects "Tomography of inclined stress corrosion cracking (SCC)", "Interaction of complex cracks in three dimensions", and "Mechanisms influencing SCC crack path away from the perpendicular".

# Role specification

## As an outstanding emerging or established research leader, you will play a crucial role in further improving the research profile of the School through your leadership contributions to a strong research group and a vibrant research culture.

Your excellent research track record will be used to advantage to attract further research funding in collaboration with colleagues. You will also have a strong commitment to excellence in teaching and a demonstrated capacity for leadership in research excellence. Teaching will be required in courses relevant to the School's programs. It is expected that research will be undertaken in an area of direct relevance to the School's activities and include collaborative research with industry.

# Selection Criteria - Professor

## Essential

- An undergraduate engineering degree in mechanical, mechatronic, sustainable energy, sports, aerospace or aeronautical engineering or a similar discipline and a PhD (or equivalent experience) in an area relevant to the School's research strengths.
- Experience in teaching courses relevant to the School of Mechanical Engineering's programs in mechanical, mechatronic, aerospace, sustainable energy and sports engineering, or similar related subjects.
- Demonstrated high levels of effectiveness in lecturing and a commitment to excellence in teaching.
- Demonstrated ability to build, inspire and lead a strong research group and to foster a vibrant research culture within the School.
- Outstanding internationally recognised research track record in the School's areas of research strength in thermo-fluids, materials and structures, acoustics and vibrations, robotics and control, biomechanical engineering, and/or the application areas of energy, aerospace, sports, mechatronics, sustainability, marine engineering, aerodynamic design, assistive technologies and humanitarian engineering.
- Demonstrated success in attracting research grant income from government and/or industry sources.
- An outstanding publication record that is internationally recognised and a high citation index relative to the field, in high quality journals that have a Mechanical Engineering component or are multi-disciplinary and are assignable to the 0913 Mechanical Engineering Field of Research Code (www.arc.gov.au/applicants/codes.htm) for the Excellence in Research for Australia exercise (http://arc.gov.au/era/).
- A commitment to advancing academic excellence and a proven track record in working in partnership with industry on innovative and effective strategies to inform engineering practice and research.
- Excellent levels of written and verbal communication skills.
- Demonstrated ability to inspire, attract, supervise, motivate and mentor students and staff at all levels in research.
- Evidence of ability to work well with colleagues, to help shape an environment suitable for research and teaching of the highest quality, a willingness to foster cross-disciplinary activity and to establish and maintain excellent working relationships with external partners

## Desirable

- Ability and desire to contribute to the leadership of the School of Mechanical Engineering and the ability to integrate their research area with the School's and a vision of how this can be achieved.
- Demonstrated commitment to promote the discipline in the community.
- Experience in curriculum development, and a commitment to curriculum design and innovation.

# Selection Criteria - Associate Professor

## Essential

- An undergraduate engineering degree in mechanical, mechatronic, sustainable energy, sports, aerospace or aeronautical engineering or a similar discipline and a PhD (or equivalent experience) in an area relevant to the School's research strengths.
- Experience in teaching courses relevant to the School of Mechanical Engineering's programs in mechanical, mechatronic, aerospace, sustainable energy and sports engineering, or similar related subjects.
- Demonstrated high levels of effectiveness in lecturing and a commitment to excellence in teaching.
- Ability to build, inspire and lead a strong research group and to foster a vibrant research culture within the School.
- An excellent research track record in the School's areas of research strength in thermo-fluids, materials and structures, acoustics and vibrations, robotics and control, biomechanical engineering, and/or the application areas of energy, aerospace, sports, mechatronics, sustainability, marine engineering, aerodynamic design, assistive technologies and humanitarian engineering.
- Demonstrated success in attracting research grant income from government and/or industry sources.
- An excellent publication record and a high citation index relative to the field, in high quality journals that have a Mechanical Engineering component or are multi-disciplinary and are assignable to the 0913 Mechanical Engineering Field of Research Code (www.arc.gov.au/applicants/codes.htm) for the Excellence in Research for Australia exercise (http://arc.gov.au/era/).
- A commitment to advancing academic excellence and working in partnership with industry on innovative and effective strategies to inform engineering practice and research.
- Excellent levels of written and verbal communication skills.
- Ability to inspire, attract, supervise, motivate and mentor students at all levels in research.
- Evidence of ability to work well with colleagues, to help shape an environment suitable for research and teaching of the highest quality, a willingness to foster cross-disciplinary activity and to establish and maintain excellent working relationships with external partners.

## Desirable

- Ability and desire to integrate their research area with the School's and a vision of how this can be achieved.
- Demonstrated commitment to promote the discipline in the community.
- Experience in curriculum development, and a commitment to curriculum design and innovation.

# Conditions of employment

## Salary

Associate Professor (Level D) $127,063 – $139,984 per annum, Professor (Level E) $163,674 per annum.

## Superannuation

The appointee may become a member of UniSuper (the national superannuation fund for Australian universities) with a generous employer contribution of 17%. Alternative superannuation arrangements may be negotiated if appropriate.

## Term of position

This continuing position is available immediately.

## Relocation costs

The University will reimburse the cost of airfares for the successful applicant and his/her family. Additionally, the University will cover the cost of removal/relocation of household items and personal effects. Other financial assistance may be negotiated.

# How to apply

## Format for written applications

Applications should consist of a full curriculum vitae detailing academic and professional qualifications, full employment history, and relevant achievements. CVs should be accompanied by a covering letter describing briefly how candidates meet the selection criteria, why the appointment is of interest and what they believe they can bring to the role.

Applications must be received by 12:00pm, Sunday 25 January 2015 (AEDT).

Shortlisting will take place in early 2015, with interviews to follow shortly after.

The appointment will be made subject to satisfactory references and it is intended that the appointee will take up employment as soon as contractual obligations allow.

Please address and upload your responses to the selection criteria section of the position description within the online application. If you have any queries regarding this position, please contact **Emma Mackenzie**, Administration Officer, telephone: +61 8 8313 5460 or email: emma.mackenzie@adelaide.edu.au

*The University of Adelaide is an Equal Employment Opportunity employer. Women and Aboriginal and Torres Strait Islander people who meet the requirements of this position are strongly encouraged to apply.*

**Closing date: Sunday 25 January, 2015**

# Living in South Australia

The Associate Professor / Professor in Mechanical Engineering will be based in Adelaide, South Australia's capital. Adelaide provides an enviable lifestyle, it is easy to get around and was recently rated as the 5th most liveable city in the world*.

Among the world's most appealing university towns, Adelaide is a safe, pollution-free, relaxed city of 1.2 million set between pristine beaches and scenic hills.

*according to The Economist Liveability Report

## Moving from another country?

If you are considering moving to Adelaide from another country, you may like to visit our 'Moving to Adelaide' website, where we have compiled some information and useful resources: **https://www.adelaide.edu.au/staff/future/moving/**

For more information on South Australia, visit **www.southaustralia.com**

## Lifestyle

South Australian's enjoy a relaxed lifestyle, in a safe and clean environment.

Its lifestyle is driven to a large degree, by a vibrant food and wine culture. The city's diverse cultural mix ensures a wide range of restaurants and cafes with sensational food, at affordable prices. South Australia is also proud to be Australia's wine capital, with popular wine regions within one hour drive of the city.

The moderate weather is a major contributor to Adelaide's easy going way of life. Average winter temperatures are 16 degrees Celsius with summer averages 28 degrees. Hot days can easily reach 40 degrees.

Living in Adelaide is affordable, with the cost of travel, eating out, and renting or buying a house considerably lower than other Australian states.

## Accommodation

There are many levels of accommodation available in Adelaide, depending on your needs and budget, but generally it is affordable compared with other cities.

As with most cities, accommodation close to the city centre is the most expensive and generally decreases in price towards the outer suburbs.

## Getting Around

Adelaide is easy to get around, and has been described as a '20 minute city' with everything within easy reach. The airport is only seven kilometres from the CBD, and the Adelaide Hills and major beaches are less than 30 minutes away by car, making the city easy to get around compared with other Australian cities.

Most people in South Australia drive cars, for which you need a driver's license. Traffic in Adelaide is relatively free-flowing and while 'peak hour' traffic is busy, it pales in comparison to other large cities. 'Early bird' parking in the city costs about $13 per day.

Adelaide has an efficient public transport system, including buses, trains and trams.

Adelaide is a great city for cyclists, with many good bicycle paths available. Commuting to the University by bicycle (bike) requires a street-legal bicycle, a helmet and a good bike lock. There are lots of places to park and lock your bike on campus.

## Major Events

Known as the "Festival State", South Australia prides itself on art and culture, with Adelaide hosting 400 annual festivals and events.

These world-leading events include: Clipsal 500 (V8 Supercar race), Santos Tour Down Under (International cycling race), Adelaide Festival (Arts), Adelaide Fringe Festival, Magic Millions Horse Racing Carnival, Royal Adelaide Show, Barossa Gourmet Weekend, WOMADelaide, Adelaide Cabaret Festival.

## Campus Life

Being based on campus at the University of Adelaide ensures a vibrant workplace environment.

Each campus offers many services and facilities, including libraries, cafes, banks, Post Office and more. There are often events held on campus, from lunchtime music events or BBQs, through to free public lectures. Staff can also get involved with the various recreational activities through the Sports Association and are welcome to join the Staff Club.


“Students receive a unique and holistic education experience that is enhanced and enriched through greater choice, access and opportunities.”

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