Position Description – Industry Research Assistant/Fellow

Position Details

Position Title: Industry Research Assistant/Fellow

College/Portfolio: STEM College

School/Group: School of Engineering

Campus Location: Based at Defence Science and Technology Group (DSTG) Fishermans Bend.

Classification: Academic Level A or B (depending on qualifications and experience)

Employment Type: Fixed Term until the end of December 2024

Time Fraction: Negotiable 0.5 - 1 FTE

RMIT University

RMIT is a multi-sector university of technology, design and enterprise with more than 96,000 students and close to 10,000 staff globally. The University's mission is to help shape the world through research, innovation and engagement, and to create transformative experiences for students to prepare them for life and work.
https://www.rmit.edu.au/about
https://www.universitiesaustralia.edu.au/university/rmit-university/

Our three main campuses in Melbourne are located in the heart of the City, Brunswick and Bundoora. Other locations include Point Cook, Hamilton and Bendigo, two campuses in Vietnam (Hanoi and Ho Chi Minh City) and a centre in Barcelona, Spain. RMIT is a truly global university.
https://www.rmit.edu.au/about/our-locations-and-facilities

We are also committed to redefining our relationship in working with, and supporting, Indigenous self-determination. Our goal is to achieve lasting transformation by maturing our values, culture, policy and structures in a way that embeds reconciliation in everything we do. We are changing our ways of knowing, working and being to support sustainable reconciliation and activate a relationship between Indigenous and non-Indigenous staff, students and community. Our three campuses in Melbourne (City, Brunswick and Bundoora campuses) are located on the unceded lands of the people of the Woi Wurrung and Boon Wurrung language groups of the eastern Kulin Nation.

Why work at RMIT University

Our people make everything at the University possible. We encourage new approaches to work and learning, stimulating change to drive positive impact. Find out more about working at RMIT University, what we stand for and why we are an Employer of Choice.
https://www.rmit.edu.au/careers

We want to attract those who will make a difference. View RMIT's impressive standings in university rankings.
https://www.rmit.edu.au/about/facts-figures/reputation-and-rankings

STEM College

The STEM College holds a leading position and expertise in the science, technology, engineering, mathematics, and health (STEM) fields. We are uniquely positioned to influence and partner with industry, as never before.

STEM College is a community of exceptional STEM researchers, teachers, inventors, designers and game-changers, supported by talented professional staff. We offer higher education programs across all STEM disciplines at the Bachelor, Masters and PhD levels, and ensure our students experience an education that is work-aligned and life-changing.

The College is renowned for its exemplary research in many STEM areas including advanced manufacturing and design; computing technologies; health innovation and translational medicine; nano materials and devices; and sustainable systems. Our brilliant researchers attract funding from government and industry sources.

Industry is at the heart of what we do. It ensures our research has real world impact, and our students are truly work-ready. Under the leadership of DVC STEM College & Vice President, Digital Innovation, we have established new hubs of industry-connected digital innovation and endeavour and are engaging with global STEM organisations at scale.

Our diversity and shared values empower our work, and we are proud of the College's inclusive, caring culture. We offer a safe, dynamic work environment, and support every member of our community of achieve their potential. The College appointed Victoria's first ever Dean of STEM, Diversity & Inclusion in 2020, and this role drives gender equity, diversity and inclusion strategies across the College.

STEM College employs 1,000 staff who deliver onshore and offshore programs to approximately 20,000 students.

We are here to positively impact the world and create the next generation of STEMM leaders.

www.rmit.edu.au/seh

School of Engineering

The School of Engineering comprises a diverse range of disciplines: Aerospace Engineering & Aviation; Chemical & Environmental Engineering; Civil & Infrastructure Engineering; Electrical & Biomedical Engineering; Electronic & Telecommunication Engineering; Manufacturing, Materials & Mechatronic Engineering; Mechanical & Automotive Engineering.

RMIT Engineering provides staff and students with access to excellent research facilities and opportunities to engage in creative real-world project work through robust relations with local and international industry leaders. Work-relevant education programs are also available to improve staff qualifications.

Key discipline areas in the School of Engineering provide programs with flexible pathways to global careers or postgraduate research. RMIT Engineering is based on innovation and creativity.

Details relating to the School/College Office may be found on at: www.rmit.edu.au/seh

Position Summary

The Industry Research Assistant (or Fellow) will undertake research activities in line with the University's research strategy. It is expected that the successful candidate will work with an increasing degree of autonomy as skills and experience develop, under the auspices of the DSTG/RMIT Centre for Advance Defence Structures and Materials Experimentation (CADSME) team. For a successful candidate with limited experience or qualifications, they will be expected to further develop their scientific capabilities/qualifications.

The position involves the operation of servo hydraulic test machines, static test machines, equipment to detect and record the response of tested items, the conduct of pre- and post-test analysis, and the use scientific instruments and techniques to aid the chief investigator and the industrial supervisor to collect data to support the preparation of reports. This may include the use of optical and electron optical microscopes and their associated capabilities, to complete the analyses. It is expected that the position's incumbent will actively help prepare test reports and any resulting deeper technical reports, journal papers, conference papers and/or carryout presentations based on the findings of these investigations.

It is expected that the incumbent will become an effective team member whom will be able to provide assistance, apart from their own testing to Defence Science and Technology Group (DSTG) personnel to set up and operate test machines and component test rigs, and to contribute to complex full-scale structural tests if required.

While the position is aimed at a relatively inexperienced candidate, those with more experience will also be considered if their qualifications and experience are well aligned. At this higher level they will be directed to carry out deeper and more complex support tasks for the DSTG structures and materials test programs and will be able to independently prepare reports, journal articles and presentations.

Reporting Line

Reports to: Prof S Barter, RMIT, Director of the Centre for Advance Defence Structures and Materials Experimentation (CADSME).

Direct reports: Nil

Organisational Accountabilities

RMIT University is committed to the health, safety and wellbeing of its staff. RMIT and its staff must comply with a range of statutory requirements, including equal opportunity, occupational health and safety, privacy and trade practice. RMIT also expects staff to comply with its policy and procedures, which relate to statutory requirements and our ways of working.

RMIT is committed to providing a safe environment for children and young people in our community. Read about our commitment and child safe practices. https://www.rmit.edu.au/about/our-locations-and-facilities/facilities/safety-security/child-safety.

Appointees are accountable for completing training on these matters and ensuring their knowledge and the knowledge of their staff is up to date.

Key Accountabilities

1. Conduct research/scholarly activities for CADSME, initially under the direction of DSTG/RMIT staff, and eventually be able to continue this work under limited supervision.
2. Carry out tasks as a member of the team that will include: publishing and presenting of research outputs at; industrial client forums, conferences and research forums.
3. For junior candidates, pursue the improvement of their qualifications in engineering or material sciences
4. For higher level candidates, contribute to external research funding submissions; participate in supervision of research candidates and undertake administration related tasks.

5. Undertake 10% teaching and supervision at the undergraduate level.

Key Selection Criteria

1. They will evidence of research outputs will be highly valued. These, in order of importance can include authored journal publications, technical reports, conference reports and presentations, or any other notable reports in the field of structures and materials experimental testing and research.
2. The successful candidate will have a strong, demonstrated commitment to working in a team environment, having shown the ability to work with colleagues confidently, effectively and harmoniously from a wide background. This demonstrated teamwork will be highly valued.
3. They will also be able to work effectively and humorously with project team leaders from Defence, RMIT, and other industry partners whom maybe party to or a client of CADSME.
4. They will have the ability to work with any or all the following: servo-hydraulic and electro-mechanical test machines, complex controllers, various mechanical test sensing systems, engineering structures and design software packages. And/or be familiar with new materials manufacturing, testing and assessment methods, that may include a knowledge of testing methods for space structures, high speed structures and/or composite structures.
5. They will have a demonstrated ability to meet deadlines and effectively manage varying workloads and respond to changing priorities as required and will be highly motivated in an innovative environment to improve their skills and/or qualifications.
6. Strong communication skills.

Qualifications

Mandatory: Qualifications in Mechanical, Aerospace or Materials Engineering or the equivalent experience in structures and materials testing, with clear evidence of progress towards a Mechanical, Aerospace or Materials Engineering degree or higher degree.

Note: Appointment to this position is subject to passing a Working with Children Check and other checks as required by the specific role. Maintaining a valid Working With Children Check is a condition of employment at RMIT.

Endorsed:	Signature: Name: Simon Barter Title: Professor: RMIT Director of the Centre for Advance Defence Structures and Materials Experimentation Date: 07/08/2023	**Approved:**	Signature: Name: Ray Kirby Title: Professor, Dean, School of Computing Technologies Date: