

Position Description – Research Fellow

Position Details

Position Title: Research Fellow

College/Portfolio: STEM College **School/Group:** School of Engineering

Campus Location: Primarily based at City campus, and the potential to work across other RMIT campuses as required.

Classification: Academic Level B

Time Fraction: 1.0

Employment Type: Fixed Term

Fixed Term Reason: Research

Reporting Line: Prof. Namita Roy Choudhury

RMIT University

RMIT is a global university of technology, design and enterprise, committed to creating transformative experiences for students and making a meaningful impact through research, innovation, and engagement. For more information on RMIT University follow the links below.

<https://www.rmit.edu.au/about>

<https://www.universitiesaustralia.edu.au/university/rmit-university/>

<https://www.rmit.edu.au/about/facts-figures>

Our campuses in Melbourne (City, Brunswick, Bundoora, and Point Cook) are complemented by international campuses in Vietnam and a centre in Barcelona, Spain. We proudly acknowledge the Woi Wurrung and Boon Wurrung peoples of the eastern Kulin Nation on whose unceded lands our campuses are located.

We are deeply committed to reconciliation and Indigenous self-determination, embedding these values throughout our policies, culture and structures.

<https://www.rmit.edu.au/about/our-locations-and-facilities>

Why Join RMIT?

Our people are at the heart of everything we do. At RMIT, we value innovation, collaboration and impact. Our values are the heart (durrung) of who we are and what we stand for at RMIT. They guide what we do, how we make decisions, and how we treat each other.



Inclusion Imagination Integrity Courage Passion Impact

Learn more about our values: <https://www.rmit.edu.au/about/our-strategy/values>

Organisational Accountabilities

RMIT is committed to the safety, wellbeing and inclusion of all staff and students. As a staff member, you are expected to comply with all relevant legislation and RMIT policies, including those related to: Equal opportunity, Occupational health and safety, Privacy and trade practices & Child safety standards:

Appointees are responsible for completing all required training and ensuring that they and their team members remain up to date on relevant compliance obligations.

Staff are expected to understand and support RMIT's child safe practices as part of their professional responsibilities. More about our child safety commitment: <https://www.rmit.edu.au/about/our-locations-and-facilities/facilities/safety-security/child-safety>.

Leadership at RMIT

At RMIT, leadership is not defined by position or hierarchy—it is a shared responsibility demonstrated by all staff, regardless of role or title. Leadership is grounded in our six core values, which guide and shape how we work together, make decisions, and create impact.

Effective leadership means consistently integrating these values into everyday actions and interactions, whether influencing a project outcome, supporting a colleague, or leading a team. All staff are expected to embody the principles of the *Be–Know–Do* Leadership Model:

Be – We are open and authentic, inclusive and empowering. We are purpose driven role models and communicators.

Know – We are self-aware, and understand our stakeholders, our sector and priorities.

Do – We set clear direction and expectations, we develop ourselves and others and promote mutual accountability to deliver results.

At every level, leadership at RMIT is about influence, contribution, and mindset. It is reflected in how we empower others, foster collaboration, and drive positive change through capability-building and alignment to strategic goals.

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, Master 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 to 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 STEM leaders.

www.rmit.edu.au/seh

School of Engineering

The School of Engineering is one of the largest Engineering Schools in Australia. It has over 350 staff and 7000 students, including 750 HDR students. The School is committed to driving innovation and collaboration through our industry partnerships. Our industry partners range from small companies to multinational organisations and we work together on translating our research into impact for our partners and the wider community.

The School has six Departments:

- Aerospace Engineering
- Biomedical Engineering
- Chemical and Environmental Engineering
- Civil and Infrastructure Engineering
- Electrical and Electronic Engineering
- Mechanical, Manufacturing and Mechatronics Engineering

In 2023 the School developed a new strategic plan, which will see an increasing emphasis on engagement with industry and other external partners. The School is developing new industry led degrees, where our students learn whilst working for companies, as well as innovation hubs where we will co-locate industry partners, our research teams and our undergraduate students.

Over the next three to five years the School of Engineering will support these new strategic plans through investments in new facilities. This will include reimaging our teaching laboratories, where we will use new digital technologies to enhance the student experience, as well as research labs where partnerships with industry will enable us to maintain leading research facilities. The STEM College is also developing plans for a large new building in the Melbourne City Campus, and the School of Engineering is expected to hold significant space in this new building.

RMIT is a global university, and the School of Engineering has students and research partners across South East Asia and Europe. This includes two campuses in Vietnam, as well as partnerships in Hong Kong, Singapore and we recently entered into a partnership with the Birla Institute of Technology and Science in India. The School also has a research centre in Barcelona, which provides access to European funding and industry partners. The School will continue to grow our international activities with the aim of becoming a globally connected School that translates technologies and training across continents.

Position Summary

The Research Associate/Fellow will work on a cutting-edge Project focused on developing biomimetic adhesive, collaborating closely with research teams and external partners specializing in the research field of biomimetic protein-based adhesives. The fixed term one year role involves translating fundamental biomimetic principles into practical application through in-vitro and in-vivo studies and will undertake research activities in line with the University's research strategy. The RA will carry out hands on and impactful research of strategic importance to RMIT with the possibility of novel and important scientific outcomes. By harnessing nature's design principles for bio-adhesion, the research work aims to develop innovative wet adhesive materials based on biomimetic strategies systematically characterizing their properties and evaluating their suitability for practical tissue adhesion and repair. Prior experience in the synthesis of recombinant protein polymer and in vivo testing will be a strong plus.

The RA will be based in Melbourne and will have access to bioprocessing, hydrogel preparation and characterization, and in vitro cell culture facilities at RMIT university. This multi-disciplinary research is expected to lead to high-impact publications, and conference presentations, while generating knowledge to advance bio-adhesion technologies that mimic the adhesion and biomechanical properties of a variety of native tissue micro-environments. We are therefore seeking to recruit a researcher with multi-disciplinary expertise and skills across areas including Tissue Engineering, Cell biology, Biomaterial/protein engineering, Biomedical, chemical engineering and to conduct cutting-edge research.

The Research Fellow will work with research teams and partnerships in the School and Research Institutes. The Research Fellow is required to undertake research activities in line with the University's research strategy. The position will carry out independent and/or team research which has a significant

impact in the area of their specialisation and be acknowledged at a national level as being influential in expanding the knowledge of their relevant discipline.

The Research Fellow will embed their research expertise into the life of the School through the development of high-quality, productivity-driven research networks across RMIT and with local and national, internal and external partners. Research Fellows will be expected to engage in high quality research projects, to achieve success in attracting research funding and to produce high quality outputs.

Key Accountabilities

1. Synthesise, fabricate biomaterial scaffolds including hydrogels and bioinks based gel and analyse in vivo, in vitro study, 2D/3D cell culture, primary cell work, and tissue engineering constructs.
2. Perform qPCR, Western blot, ELISA, flow cytometry, and microscopy and conduct animal studies including implantation, monitoring, and tissue collection. Ensure compliance with Animal Ethics, biosafety and PC2 requirements.
3. Conduct and assist with animal studies including implantation, monitoring, and tissue collection. Ensure compliance with Animal Ethics, biosafety and PC2 requirements.
4. Conduct high quality research individually or as part of a team including: managing research projects within timelines and ensuring compliance with quality and reporting requirements.
5. Publishing research results in high quality outlets as lead or co-author; preparing and submitting external research funding applications; and supervising higher degree by research/UG candidates.

Key Selection Criteria

1. A PhD in Tissue Engineering, Biomaterials, Biomedical Engineering, Cell Biology or related field.
2. Experience in tissue engineering, biomaterials fabrication and strong skills in in vitro, in vivo, aseptic cell culture.
3. Experience in animal studies and ethics compliance.
4. Emerging track record and recognition for quality research outputs which will contribute to existing Discipline and School research areas evidenced by publications, development of new research initiatives, competitive research funding, and industry links.
5. Demonstrated ability to supervise research students.
6. Ability to build effective networks with colleagues and generate alternative funding projects through effective liaison with industry and government.
7. Excellent interpersonal and communications skills appropriate for interacting with higher degree by research candidates, staff and industry, together with a strong commitment to teamwork and multidisciplinary collaboration.
8. Ability to work autonomously whilst displaying a strong commitment to work in a team environment, including the demonstrated ability to confidently and effectively work with colleagues, project team leaders, and industry partners.
9. Demonstrated ability to meet deadlines and effectively manage varying workloads and respond to changing priorities as required.

Qualifications

Mandatory: PhD or equivalent in relevant field

Working with Children Check

Appointment to this position is subject to holding a valid Victorian 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.