

Position Description - Research Fellow

Position Details

Position Title: Research Fellow

College/Portfolio: STEM College

School/Group: School of Science, Applied Chemistry & Environmental Science

Campus Location: Based at the City campus, but may be required to work and/or be based at other

campuses of the University.

Classification: Academic Level B

Employment Type: Fixed Term

Time Fraction: 1.0

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, 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 Science

The School of Science provides more than 45 bachelor and postgraduate programs to 5,000 students and undertakes world-class research across the disciplines of:

- biosciences and food technology
- applied chemistry and environmental science
- physics
- mathematical sciences
- geospatial sciences
- computer science (information technology and software engineering)

Across the City and Bundoora campuses, the School employs more than 260 academic staff (including 70 research intensive staff), 35 professional staff, as well as 430 casual and sessional staff, and supervises almost 400 Higher Degree by Research candidates.

Position Summary

The Research Fellow will work with the research team of Professor Michelle Spencer and partnerships in the School and Research Institutes. You will be 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's role is primarily to plan, develop and engage in high quality research projects that are aligned with the University's research focus areas and those of the Computational Materials Chemistry Group, led by Professor Spencer. You will embed your 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. You will be expected to engage in high quality research projects, to achieve success in attracting research funding and to produce high quality outputs.

Reporting Line

Reports to: Professor Michelle Spencer, Deputy Director, STEM Centre for Digital Innovation

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/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

- Conduct high quality research individually or as part of a team including: managing research
 projects within timelines and budget and ensuring compliance with quality and reporting
 requirements; 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
 candidates.
- 2. Actively contribute to the development of research strategy within the research team, ensuring it aligns to University strategy.
- 3. Undertake 10% teaching and learning program appropriate to areas of expertise.

Key Selection Criteria

- 1. Emerging track record and recognition for quality research outputs that will contribute to the Computational Materials Chemistry group of Professor Michelle Spencer, as evidenced by publications, development of new research initiatives, competitive research funding, and industry links.
- 2. Evidence of experience in performing density functional theory calculations and *ab initio* molecular dynamics simulations, particularly using the Vienna *ab initio* Simulation Package (VASP) and similar related codes to calculate the structure, properties and surface reactions of materials and 1D and 2D nanomaterials for energy storage, sensors and sustainable technologies.
- 3. Demonstrated expertise in performing calculations using high performance supercomputing facilities and performing data analysis related to VASP and similar calculations. This includes calculating band structures, density of states, partial charges, defect/dopant energies, and other related properties. An ability to code is an advantage.
- 4. Demonstrated ability to supervise higher degree by research candidates.
- 5. Ability to build effective networks with colleagues and generate alternative funding projects through effective liaison with industry and government.
- 6. 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.

RMIT Classification: Trusted

Qualifications

Mandatory: PhD or equivalent in relevant field

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:	Approved:	Signature:
	Name:		Name:
	Title:		Title:
	Date:		Date: