



## Position Description – Research Fellow – Thermal Energy & Heat Pumps

### Position Details

---

<b>Position Title:</b>	Research Fellow – Thermal Energy & Heat Pumps
<b>College/Portfolio:</b>	STEM College
<b>School/Group:</b>	School of Engineering
<b>Campus Location:</b>	Based at the Melbourne CBD campus, however, may be required to work and/or be based at other campuses of the University.
<b>Classification:</b>	Academic Level B
<b>Employment Type:</b>	Fixed Term for 1 year (Research)
<b>Time Fraction:</b>	1.0 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, 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 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 STEM leaders.

[www.rmit.edu.au/seh](http://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.

As a top 100 university in the world for engineering (2015 QS Rankings by Faculty; Engineering and Technology), RMIT Engineering provides students with work-relevant education programs, access to excellent research facilities and opportunities to engage in creative real-world project work through robust relations with local and international industry leaders.

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

For more information, visit <https://www.rmit.edu.au/about/schools-colleges/engineering>

## Position Summary

---

As a Research Fellow, you will be a member of the Laboratory for Innovative Fluid Thermal Systems (LIFTS) at RMIT University. In this position, you will be the key researcher in a new project funded by the Renewable, Affordable, Clean Energy for 2030 Cooperative Research Centre (RACE for 2030 CRC). This project aims to design and manufacture a new heat pump system for heating and cooling in buildings. You will be expected to:

- develop engineering performance and system level models for an integrated thermal storage and heat pump system,
- write reports, meet milestones, deliver presentations to the project stakeholders, and
- communicate and collaborate effectively with the academic team at RMIT and the industry partner to solve complex engineering problems.

## Reporting Line

---

Reports to: Dr Ahmad Mojiri

## 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

---

- Conduct high quality research individually and as part of the team including managing the research project activities within timelines and budget and ensuring compliance with quality and reporting requirements
- Undertake theoretical research and engineering design to contribute to the development of a commercial product.
- Write and publish high quality research reports and journal publications.
- Actively contribute to the development of research strategy within the research team, ensuring it aligns to University strategy.

## Key Selection Criteria

---

1. Demonstrated experimental research experience in heat transfer/fluid mechanics or energy systems.
2. Demonstrated experience with modelling/designing heating and cooling systems.
3. 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.
4. Ability to clearly communicate research results, concepts and knowledge.
5. Demonstrated initiative in research and problem solving.
6. Excellent interpersonal and communication skills appropriate for interacting with higher degree by research candidates, staff and industry, together with a strong commitment to teamwork and multidisciplinary collaboration.
7. Demonstrated ability to work effectively both as a member of a research team and independently when required, to meet project outcomes and milestones.
8. Ability to supervise postgraduate by research students.
9. Ability to contribute to the teaching and learning program in a relevant field.

**Qualifications**

---

Mandatory: PhD in Mechanical Engineering or a relevant field is required for this role.

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.

<b>Endorsed:</b>	Signature: Name: Title: Date:	<b>Approved:</b>	Signature: Name: Title: Date:
------------------	--	------------------	--