

Position Description – Research Assistant (Space Physics)

Position Details

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| Position Title: | Research Assistant (Space Physics) |
| Position Number: | NEW |
| College/Portfolio: | Science, Engineering and Health |
| School/Group: | School of Science |
| Campus Location: | Either based at the Melbourne City campus, or the Bureau of Meteorology Space Weather Services office in Sydney. |
| Classification: | Academic Level A <i>Salary Schedule:</i> http://www.rmit.edu.au/browse;ID=ewhlt73t01 |
| Employment Type: | Fixed Term – Research <i>Note: See Reasons for fixed term appointments guideline for explanation of fixed term categories</i> |
| Time Fraction: | 1.0 |

RMIT University

RMIT is a global university of technology, design and enterprise in which teaching, research and engagement are central to achieving positive impact and creating life-changing experiences for our students.

Founded in 1887, RMIT is a multi-sector university with more than 87,000 students including 15,000 at postgraduate level and 11,000 staff globally. The University offers Postgraduate, Undergraduate, Vocational Education and Online programs to provide students with a variety of work-relevant pathways.

With three campuses and two sites in Australia, two campuses in Vietnam and a research and industry collaboration centre in Barcelona, Spain, RMIT is a truly global university. RMIT also offers programs through partners in Singapore, Hong Kong, mainland China and Indonesia, and has research and industry partnerships on every continent.

RMIT enjoys an international reputation for excellence in education and applied and innovative research, as well as industry and community engagement.

RMIT prides itself on the strong industry links it has forged over its 130-year history. Collaboration with industry is integral to the University's leadership in education and research, and to the development of highly skilled, globally-focused graduates.

RMIT was ranked 250th in 2019 QS World University Rankings. The University is also ranked eighth in Australia and 30th in East Asia and the Pacific for employer reputation and 21st in the Top 50 Universities Under 50 Years Old.

In the 2018 QS Rankings by Subject, RMIT was ranked 11th in the world and number one in the Asia Pacific for Art and Design, and 26th in Architecture and the Built Environment. RMIT is also among the world's top 100 universities in Engineering (Civil and Structural; Electrical and Electronic; and Computer Science and Information Systems); Accounting and Finance; Business and Management Studies; and Communication and Media Studies. The 2018 Shanghai Ranking's Global Ranking of Academic Subjects highlighted RMIT's strength in Engineering and Technology in particular.

RMIT also ranks in the world's top 400 in the 2018 Academic Ranking of World Universities and in the world's top 500 in 2018 Times Higher Education World University Rankings.

For more information, visit rmit.edu.au/about

College/Portfolio/Group

The College comprises four Schools delivering a broad range of programs in science, engineering, health and technology at apprenticeship, certificate, bachelor, masters and PhD levels. Many programs articulate between vocational and higher education, creating pathways for further study. There is a vibrant research community attracting funding from a range of government and industry sources. The College has an annual income of approximately \$425 million and employs over 1,000 staff providing on and offshore programs to approximately 20,000 students.

More information about the College may be found at: www.rmit.edu.au/seh

School of Science

The School of Science provides over 45 bachelor and postgraduate programs, and undertakes world class research across the disciplines of physical sciences, mathematical sciences and computer science.

One of RMIT's top-performing research schools, we deliver research that addresses the 'real life questions' essential to Australia's innovation agenda. Our high-quality teaching programs inspire students to pursue careers in a range of industries including health, materials technology, food, geospatial and surveying, environmental analysis, banking and commerce, as well as computing and IT roles and research and development across a wide range of areas.

The School has staff, students and facilities on both the City and Bundoora campuses, has 300 staff, 327 higher degree research students, 3347 coursework students and an annual budget of \$120 million.

Details relating to the School can be found at www.rmit.edu.au/about/our-education/academic-schools/science/

Position Summary

The Research Assistant will work on the Australian Research Council Linkage Program Project "Next generation space weather forecasts"; a joint project between RMIT University, the Bureau of Meteorology and Boston College. The Research Assistant is required to undertake research activities in the areas of space and ionospheric physics, with a particular emphasis on obtaining a better understanding of the space weather impact on Global Navigation Satellite System (GNSS) applications. This research will include the analysis of data from a range of ionosphere/magnetosphere observation platforms and techniques, in addition to the use of advanced models of the near-Earth space environment. The Research Assistant is expected to lead, undertake and participate in day-to-day operation of the research work, in addition to some management tasks related to the administration of the project; e.g., coordination of project reporting, project meeting preparation, etc.

Reporting Line

Reports to: ARC Linkage Project LP160100561 Lead Chief Investigator

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.

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 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.
- Actively contribute to the development of research strategies within the research team, ensuring that they align with those of the University.

Key Selection Criteria

1. Technical competence in the fields of ionospheric and space physics, and a solid understanding of the various space science instrumentation, observation techniques (particularly GNSS Radio Occultation), geomagnetic activity indices and other space weather data, and knowledge of state-of-the-art space environment models
 2. Proficiency in numerical analysis, scientific computing and software development skills using Fortran, IDL, Python, Matlab or C/C++, with experience preferable in both Windows and Linux environments
 3. A demonstrated capacity to plan strategically and think creatively to conduct innovative research
 4. Proven ability to clearly communicate research results, concepts and knowledge, particularly in oral and written form
 5. Proven ability to work both independently and as part of a collaborative, multi-disciplinary team and build links to other activities
 6. The ability to produce high quality and high impact research output, and
 7. Demonstrated experience in competitive grant application and project management
 8. Undertake limited undergraduate and postgraduate coursework teaching activities proportionate to 10% of the position, in accordance with the College's Academic Workload Framework
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Qualifications

Mandatory: A PhD or equivalent in the area of space physics, or a related field.

Note: Appointment to this position is subject to passing a mandatory Working with Children check.

Completion of the Essentials in Tertiary Teaching Practice program or equivalent¹ (if the appointed candidate does not meet this requirement at time of appointment, they will be supported to complete this as a requirement to fulfil their probation).

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| Endorsed: | Signature: Name: Dr Brett Carter Title: Senior Lecturer Date: | Approved: | Signature: Name: Prof Russell Crawford Title: Executive Dean of School of Science Date: |
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¹ Equivalence is defined in the exemption criteria at <http://www.rmit.edu.au/browse;ID=3sdrya7u8m9v1>