Position Number: 00043855  
Position Title: Research Associate  
Date Written: September 2020

Faculty / Division: Engineering  
School / Unit: Civil & Environmental Engineering/ Water Research Centre  
Position Level: Level A

ORGANISATIONAL ENVIRONMENT

UNSW is currently implementing a ten year strategy to 2025 and our ambition for the next decade is nothing less than to establish UNSW as Australia’s global university. We aspire to this in the belief that a great university, which is a global leader in discovery, innovation, impact, education and thought leadership, can make an enormous difference to the lives of people in Australia and around the world.

Following extensive consultation in 2015, we identified three strategic priority areas. Firstly, a drive for academic excellence in research and education. Universities are often classified as ‘research intensive’ or ‘teaching intensive’. UNSW is proud to be an exemplar of both. We are amongst a limited group of universities worldwide capable of delivering research excellence alongside the highest quality education on a large scale. Secondly, a passion for social engagement, which improves lives through advancing equality, diversity, open debate and economic progress. Thirdly, a commitment to achieving global impact through sharing our capability in research and education in the highest quality partnerships with institutions in both developed and emerging societies. We regard the interplay of academic excellence, social engagement and global impact as the hallmarks of a great forward-looking 21st century university.

To achieve this ambition we are attracting the very best academic and professional staff to play leadership roles in our organisation.

VALUES IN ACTION: OUR UNSW BEHAVIOURS

UNSW recognises the role of employees in driving a high-performance culture. The behavioural expectations for UNSW are below.

- Demonstrates Excellence: Delivers high performance and demonstrates service excellence.
- Drives Innovation: Thinks creatively and develops new ways of working. Initiates and embraces change.
- Builds Collaboration: Works effectively within and across teams. Builds relationships with internal and external stakeholders to deliver on outcomes.
- Embraces Diversity: Values individual differences and contributions of all people and promotes inclusion.
- Displays Respect: Treats others with dignity and empathy. Communicates with integrity and openness.
**OVERVIEW OF RELEVANT AREA AND POSITION SUMMARY**

The School of Civil and Environmental Engineering is the largest School in the Faculty of Engineering with over 3,300 students and an operating budget of over $23 million. The School has 48 full time academic staff, 30 professional and technical staff and 80 research only appointments. The School’s mission is to develop well-educated graduates with the essential skills, attributes and knowledge that will enable them to practice as professional civil or environmental engineers; and to conduct research and development of international distinction to meet the needs of the discipline, industry and society. For further information about the School, please visit [http://www.civeng.unsw.edu.au/](http://www.civeng.unsw.edu.au/)

The UNSW Water Research Centre (WRC) is a research centre of the School of Civil & Environmental Engineering at the University of New South Wales. Researchers at the WRC are active in research of a wide range of water and waste related projects.

The Research Associate is required to contribute to a research project aimed at enhancing satellite retrievals of soil moisture and other hydrologic variables for us in a range of assessment and modelling applications.

The role of Research Associate reports to Professor Ashish Sharma and has no direct reports.

**RESPONSIBILITIES**

Specific responsibilities for this role include:

- Conduct research in the area of Satellite Remote Sensing with applications to Hydrology with a record of publications in both in high impact outlets.
- Contribute to the writing of scientific papers and reports for international journals and progress reporting to other researchers and industry partners.
- Assist with the coordination of research activities and actively contribute to research outputs to meet project milestones.
- Contribute to the preparation of research proposal submissions to funding bodies and actively seek collaboration with industry partners as appropriate.
- Participate in and/or present at conferences and/or workshops relevant to the project as required.
- Assist with the supervision of undergraduate and research students in the research area where required.
- Develop a limited amount of research related material for teaching or other purposes with appropriate guidance from other staff.
- Cooperate with all health and safety policies and procedures of the university and take all reasonable care to ensure that your actions or omissions do not impact on the health and safety of yourself or others.

**SELECTION CRITERIA**

- PhD in Engineering or a related area.
- Demonstrated ability to conduct independent research with limited supervision.
- Demonstrated track record of publications and conference presentations relative to opportunity.
- Demonstrated ability to work in a team, collaborate across disciplines and build effective relationships.
- Experience in Semi-Distributed Hydrological Modelling and specifically with SMART for eco-hydrological simulations across Australia.
• Effective interpersonal skills with demonstrated ability to communicate and interact with a diverse range of stakeholders and students.

• Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training.

It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.