POSITION DESCRIPTION

THE UNIVERSITY OF MELBOURNE

School of BioSciences
Faculty of Science

Research Fellow in Coastal Numerical Modelling

POSITION NO	0063610
CLASSIFICATION	Level A
SALARY	$105,518 - $113,262 p.a.
SUPERANNUATION	Employer contribution of 17%
WORKING HOURS	Full-Time
EMPLOYMENT TYPE	Fixed-Term for 2 years **FLEXIBLE EMPLOYMENT** The University of Melbourne is strongly committed to supporting diversity and flexibility in the workplace. Applications for part-time or other flexible working arrangements will be welcomed and will be fully considered subject to meeting the inherent requirements of the position.
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers, select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Dr Rebecca Morris Tel +61 423 392 882 rebecca.morris@unimelb.edu.au *Please do not send your application to this contact*

For information about working for the University of Melbourne, visit our website:
about.unimelb.edu.au/careers

Acknowledgement of Country

The University of Melbourne acknowledges the Traditional Owners of country throughout Australia. The University recognises the unique place held by Aboriginal and Torres Strait Islander peoples as the original custodians of country and their continued connection to the land, waterways, songlines and culture. The University respects all Aboriginal and Torres Strait Islander People and warmly embrace those students, staff, Elders and collaborators who identify as First Nations.

Position Summary

The School of BioSciences at the University of Melbourne is seeking a Research Fellow with expertise in coastal processes, and hydrodynamics and sediment transport numerical modelling.

The Research Fellow will work closely with Dr Rebecca Morris on research aligned with the Australian Research Council (ARC) funded project '*Improving the success of hybrid living shorelines for coastal protection'*. This project will focus on optimising the design of hybrid mangrove living shorelines and will involve a combination of numerical modelling, field-based experimentation, and wave flume studies.

The successful incumbent will work with a team of interdisciplinary researchers, postgraduate students and industry partners and is expected to contribute actively to the dynamic intellectual environment of the host group and School more broadly.

This Research Fellow will be expected to publish in high quality journals, attend scientific conferences and mentor research students.

We encourage applicants from under-represented groups, including Aboriginal and Torres Strait Islander people. To allow us to consider performance relative to opportunity, we also invite applicants to provide a brief statement (up to 1 page) that describes circumstances that may have affected their career development or progression, including career interruptions or delays, periods of part time work, or forms of bias they have experienced.

1. Key Responsibilities

As with all positions, career achievements will be interpreted relative to opportunity, including career disruptions due to caring responsibilities, time in industry, illness etc.

A level A academic is acquiring skills and building academic achievements (oriented towards the benchmarks).

1.1 RESEARCH

The appointee will be expected to:

- In collaboration with Senior Academic staff conduct internationally competitive research, resulting in publications in high impact journals
- Contribute to and publish academic papers and other scholarly outputs to a high academic standard in accordance with the research expectations of the University of Melbourne
- Contribute to the preparation, or where appropriate individual preparation of research proposal submissions to internal or external funding bodies as relevant.

- Active participation in research seminars, and national and international conferences
- Contribute to developing networks within the discipline and with other universities, institutions and communities, both nationally and internationally, to support collaboration.
- Present research to the public to elevate public awareness of educational and scientific developments and promote critical enquiry and public debate within the community.
- Undertake administrative functions and obligations primarily connected with the staff member's area of research

1.2 LEADERSHIP AND SERVICE

The appointee will be expected to:

- Actively participate at School meetings and contribute to planning activities or committee work to support capacity building in the School/discipline.
- Involvement in professional activity in the discipline.
- Effective demonstration and promotion of University values including diversity and inclusion and high standards of ethics and integrity

1.3 OTHER DUTIES

The appointee will be expected to:

- Perform other tasks as requested by the supervisor or the Head of School
- Actively participate in the University Professional Development Framework
- Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 4.

2. Selection Criteria

2.1 ESSENTIAL

- Completion (or near completion) of a PhD in coastal hydrodynamics or engineering or marine science, or equivalent qualification
- A research track record relevant to understanding and predicting coastal processes, including expertise in numerical modelling of coastal hydrodynamics (using codes such as SWAN, XBeach or SWASH), as evidenced by high-quality research publications in journals, conferences, technical reports, or other scholarly publications.
- Advanced expertise in analysis of coastal datasets using scientific programming languages such as Python or Matlab.
- A demonstrated aptitude for independent research, with a sound publication record in relevant areas, commensurate with experience and opportunities.
- Demonstrated excellent organisational skills to meet deadlines and bring projects to a timely completion
- Excellent interpersonal and communication skills including the ability to build positive, professional relationships with staff, collaborators and students.

2.2 DESIRABLE

- Demonstrated track record in numerical modelling of coastal sediment transport and morphodynamic processes.
- The ability to attract external funding through grant applications and/or support in funded joint projects with others internal or external to the university.
- Experience in assisting with supervision of students undertaking undergraduate or higher degree research projects.

3. Equal Opportunity, Diversity and Inclusion

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion, and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the Advancing Melbourne strategy that addresses diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous desire to strive for excellence and reach the targets of Advancing Melbourne.

4. Occupational Health and Safety (OHS)

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

http://safety.unimelb.edu.au/topics/responsibilities/

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

5. Other Information

5.1 THE SCHOOL OF BIOSCIENCES

https://biosciences.unimelb.edu.au

This position presents an opportunity to join The University of Melbourne's School of BioSciences. The School of BioSciences is the home to over 50 research groups, 5

research Centres, 160 academic staff and 240 Research Higher Degree students. Work in the School ranges from discovery to biotechnology with strengths in ecology and evolution, marine biology, microbial biology, genetics and genomics, animal behaviour, biosecurity and pest management, reproductive biology, systems biology, biological pollution and botany.

https://nccc.edu.au/

The National Centre for Coasts and Climate was established in 2015 and is based in the School of BioSciences at the University of Melbourne. It is jointly funded through the University of Melbourne and the Earth Systems and Climate Change Hub of the Australian Government's National Environmental Science Program.

5.2 FACULTY OF SCIENCE

http://www.science.unimelb.edu.au

Science at Melbourne is a global leader across fundamental and impactful scientific research and education. Science begins with curiosity, and we are dedicated to understanding the universe from the level of sub-atomic particles to the solar system. We aim to be leaders who positively impact the community locally and globally, addressing major societal issues from climate change to disease. Our discoveries help build an understanding of the world around us.

Our strength is our breadth of expertise. We are the second largest faculty in the University comprising seven schools: Agriculture, Food & Ecosystem Sciences, BioSciences, Chemistry, Geography, Earth & Atmospheric Sciences, Mathematics & Statistics, Physics and Veterinary Science.

This depth of knowledge positions the faculty to better understand, explore and impact our world and humanity, within a truly comprehensive Faculty of Science.

We have more than 150 years of experience in pioneering scientific thinking and analysis, leading to outstanding teaching and learning and offer a curriculum based on highly relevant research. We aim to train students with the knowledge and intellectual flexibility to drive the industries of tomorrow and lead across all levels of society.

We offer a range of undergraduate, honours, graduate and research degrees, enrolling more than 11,500 undergraduate and 3,750 graduate students.

We are dedicated to delivering leading transformative educational outcomes, underpinned by research, and an inclusive and inspiring student experience.

Excellence comes in many forms and diversity of thought, perspective and disciplines is essential to deliver globally leading science. At the core of our success is our focus on an inclusive environment for all in our community. Our Faculty's focus on equity, inclusion and belonging is grounded in our endeavour to ensure we are best placed to advance research, teaching and serve diverse national and global communities.

As a Science community we sit across five of the University's campuses – Parkville, Dookie, Burnley, Creswick and Werribee. This reach provides us with a unique perspective that is beneficial to our teaching and research. It also means we can offer our students a greater variety of learning experiences and internships to engage with industry partners to solve real-world issues.

The Faculty is custodian of the Bio21 Molecular Science and Biotechnology Institute, Melbourne Energy Institute, Melbourne Biodiversity Institute, Office for Environmental

Programs, Australian Mathematical Sciences Institute (AMSI) and the Indigenous Knowledge Institute and home to numerous Centres.

5.3 THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville is recognised as the hub of Australia's premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide-range of knowledge-based industries. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded.

Further information about working at The University of Melbourne is available at http://about.unimelb.edu.au/careers.

5.4 ADVANCING MELBOURNE

The University's strategic direction is grounded in its purpose. While its expression may change, our purpose is enduring: to benefit society through the transformative impact of education and research. Together, the vision and purpose inform the focus and scale of our aspirations for the coming decade.

Advancing Melbourne reflects the University's commitment to its people, its place, and its partners. Our aspiration for 2030 is to be known as a world-leading and globally connected Australian university, with our students at the heart of everything we do.

- We will offer students a distinctive and outstanding education and experience, preparing them for success as leaders, change agents and global citizens.
- We will be recognised locally and globally for our leadership on matters of national and global importance, through outstanding research and scholarship and a commitment to collaboration.
- We will be empowered by our sense of place and connections with communities. We will take opportunities to advance both the University and the City of Melbourne in close collaboration and synergy.
- We will deliver this through building a brilliant, diverse and vibrant University community, with strong connections to those we serve.

The means for achieving these goals include the development of the University of Melbourne's academic and professional staff and the capabilities needed to support a modern, world-class university. Those means require a commitment to ongoing financial sustainability and an ambitious infrastructure program which will reshape the campus and our contribution to the communities we engage with. This strategy, and the priorities proposed, is centred around five intersecting themes: place, community, education, discovery and global.

5.5 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at http://www.unimelb.edu.au/governance