

POSITION TITLE	Postdoctoral Fellow in Physical Oceanography
COLLEGE	College of Science and Engineering
SCHOOL/SECTION	Institute for Marine and Antarctic Studies/Oceans and Cryosphere
CAMPUS	IMAS - Salamanca
CLASSIFICATION	Level A/B
DATE	September 2019

POSITION SUMMARY

The University of Tasmania is building a vision of a place-based University with a mission to enhance the intellectual, economic, social and culture future of Tasmania, and from Tasmania, contribute to the world in areas of distinctive advantage. The University recognises that achieving this vision is dependent on the people we employ as well as creating a people-centred University that is values-based, relational, diverse, and development-focused.

IMAS is an internationally-recognised centre of excellence for marine and Antarctic research and education. Our vision is to develop environmental understanding and facilitate sustainable development for the benefit of industry, governments and communities in Tasmania, Australia and the world. IMAS has three core areas of research focus, in fisheries and aquaculture, ecology and biodiversity, and oceans and cryosphere; and collaborates across the major themes of climate change, ocean-Earth systems, and oceans and Antarctic governance.

The position of Postdoctoral Fellow in Physical Oceanography is funded by a grant from the Australian Research Council Discovery Project "How does topography brake the Antarctic Circumpolar Current", a collaborative project with investigators from University of Tasmania, CSIRO, Woods Hole Oceanographic Institution and University of Rhode Island. The aim of the project is to observe and simulate the mechanisms that have allowed the transport of the ACC to remain steady in spite of strengthening Southern Ocean winds over the last two decades. The work will be conducted at the Waterfront campus of the Institute for Marine and Antarctic Studies (IMAS).

The Postdoctoral Fellow in Physical Oceanography will work with the already-collected high-resolution *in situ* survey of the watermass and velocity structure of a stationary meander in the ACC upstream of the Macquarie Ridge, and high-resolution simulations of the region from idealised and realistic modelling systems. The Fellow will work with the project investigators to identify the processes responsible for the transfer of momentum and energy from the surface into the deep ocean, for meridional fluxes of properties across the ACC, and to investigate the mechanisms governing the response of the ACC to changes in winds. There is also scope to investigate the biogeochemical structure of the meander in both observations and simulations.

The position has a significant team focus and will provide strong quantitative and analytical skills to the activities of the group. The position demands a productive and innovative researcher capable of initiating and driving independent research ideas as well as supporting the work of others. The position is fixed term for a period of 2 years.

We are an inclusive workplace committed to 'working from the strength that diversity brings' reflected in our Statement of Values. We are dedicated to attracting, retaining and developing our people and are committed to inclusive principles and celebrate the range of diversity assets which gender identity, ethnicity, sexual orientation, disability, age and life course bring. Applications are encouraged from all sectors of the community.

POSITION RELATIONSHIPS

Supervisor	Prof Nathan Bindoff
Direct reports	NIL
Other	The incumbent must relate in an effective way with: <ul style="list-style-type: none">• Investigators and students on the project• All academic, research and administrative staff of IMAS• Relevant staff of partner organisations and other national and international collaborators.

KEY ACCOUNTABILITIES AND OUTCOMES

1.	Make an effective and sustained contribution to the University in achieving its strategic objectives and fulfilling its operational responsibilities.
2.	Undertake innovative research using observations and high-resolution simulations to investigate the dynamics within a standing meander of the ACC, including the transfer of momentum and energy from the surface into the deep ocean, meridional fluxes across the ACC, and the mechanisms governing the response of the ACC to changes in winds.
3.	Contribute to the development of innovative concepts and ideas for further research.
4.	Contribute to leadership of the project, at a level commensurate with the experience and Academic Level of the appointment
5.	Publish high impact original research papers in a timely fashion and provide input, including seminars on research results, to partner agencies.
7.	Contribute to communication with research users. <ul style="list-style-type: none">• participate in communication activities with research users and other scientists;• provide research updates, including technical summaries, to partners and enterprises.
8.	Assist with the supervision and training of research students and technical staff.
9.	Contribute to the development and maintenance of productive and effective links inside the University and locally and nationally with the discipline, relevant interdisciplinary domains, profession, industry and/or wider community.
10.	Undertake other duties as assigned by the supervisor.

DECISION MAKING AUTHORITY/LEVEL OF RESPONSIBILITY

1. Tasks are performed under the general direction of the supervisors.
2. Level of responsibility as appropriate to Academic Level A-B in accordance with UTAS Academic Staff Classification Descriptors (See: <http://www.human-resources.utas.edu.au>)

POSITION CRITERIA

Essential Requirements

1. A PhD in a relevant area of science (e.g. physical oceanography or climate science).
2. Excellent understanding of ocean dynamics and the ocean's role in climate.
3. High level quantitative skills, as demonstrated through analysis and interpretation of complex ocean/atmosphere data or numerical simulations.
4. Demonstrated ability to carry out original, independent, and innovative research with a minimum of direct supervision.
5. Demonstrated ability to work collaboratively in a research team covering multiple

disciplines and to achieve collective as well as individual outcomes.

6. A high level of written and oral communication skills suited for science specialist and generalist user groups.

Desirable Attributes

7. Knowledge of Southern Ocean climate dynamics.
8. Demonstrated experience in research higher degree supervision.
9. Interest in multi-disciplinary research (e.g. interactions between the cryosphere, oceans, atmosphere, biogeochemical processes or ecosystems).
10. Ability and interest in working at sea on oceanographic voyages.

WORKPLACE HEALTH AND SAFETY

- All staff assist the University to create and maintain an environment where people are safe, healthy and well by using and improving the systems and equipment we have for work.
- All staff actively manage risks associated with their work and report hazards, near-misses and incidents to their Supervisor to enable teams to positively learn and improve our systems and equipment.
- Supervising staff support and equip their teams to work safely by providing information, training and supervision. They respond quickly to issues and create an environment where teams are encouraged to positively intervene and empowered to make improvements.

UTAS VALUES AND BEHAVIOURS



We subscribe to the fundamental values of **honesty, integrity, responsibility, trust and trustworthiness, respect and self-respect, and fairness and justice**. We bring these values to life by our individual and collective commitment to:

- * Creating and serving shared purpose
- * Nurturing a vital and sustainable community
- * Focusing on opportunity
- * Working from the strength diversity brings
- * Collaborating in ways that help us be the best we can

Our [University Behaviour Policy](#) sets out these values, standards and expectations for appropriate behaviour that apply to all employees and characterise the collegial and community nature of our University.