

Postdoctoral Research Fellow, Level A in Applied marine biogeochemistry

College/Division	College of Science and Engineering
School/Section	Institute for Marine and Antarctic Studies
Location	Hobart
Classification	Academic
Reporting line	Reports to Senior Lecturer Marine Ecology

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.

We are seeking to appoint a Postdoctoral Research Fellow in the [School of Natural sciences](#) as part of [the College of Science and Engineering](#).

The postdoctoral research project is located within the wider context of ocean-based climate intervention. More specifically, the postdoctoral researcher shall assess to what extent the atmospheric CO₂ removal (CDR) method 'Ocean Alkalinity Enhancement' could induce an Earth system feedback that leads to enhanced global ocean calcification by marine organisms. This 'white ocean hypothesis' is a concern because adding alkalinity to the oceans could improve the carbonate chemistry conditions for biotic calcification, thereby marine calcium carbonate precipitation, which ultimately would reduce ocean alkalinity (and thus the capacity of the oceans to store CO₂).

The 'white ocean hypothesis' will be tested by utilizing two large-scale natural analogues for a high-alkalinity future ocean, the Black Sea and the Caspian Sea. Both of these marginal seas have alkalinities which are roughly 1.5 times as high as alkalinity in the global oceans and thus serve as natural test beds. The successful candidate will primarily utilize available satellite and BGC-Argo data to investigate this hypothesis and the research will be backed up by experimental work within the research team. The successful candidate will be integrated into the main research subject of the 'Carbon & Plankton group' (i.e. Ocean Alkalinity Enhancement) and work within a highly motivated research team. The successful candidate would be expected to interactively collaborate with the research team to maximize scientific process on the topic.

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. We celebrate the range of diverse assets that gender identity, ethnicity, sexual orientation, disability, age and life course bring. Applications are encouraged from all sectors of the community. Tell us how we can make this job work for you.



What You'll Do

- Make an effective and sustained contribution to the University in achieving its strategic objectives and fulfilling its operational responsibilities.
- Undertake high-quality research/scholarly activities under limited supervision as a member of a team, publish research findings in order to meet and regularly exceed the University's research performance expectations for Level A.
- 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
- Undertake other duties as assigned by the supervisor.

What We're Looking For (success criteria)

- A four-year tertiary qualification (e.g. PhD) in a relevant field and/or equivalent qualifications and/or professional experience.
- Proven ability to work in research teams, a high level of motivation and engagement, and the ability to support other scientists within the research team.
- A demonstrated ability and understanding of research in the field of **marine biogeochemistry with specific strength in working with satellite and BGC-Argo data**, demonstrated by a strong academic record.
- Highly skilled with computational software to work with large data, such as R, python, or Julia
- A record of contributing to building and maintaining effective and productive networks with the discipline, profession, industry (where relevant) and wider community.

Other position requirements

- Good communication skills in English

University of Tasmania

The University of Tasmania is an institution with an enduring commitment to our state and community, and a strong global outlook. We are committed to enhancing the intellectual, economic, social and cultural future of Tasmania. Our [Strategic Direction](#) strongly reflects the University community's voice that our University must be place based but globally connected as well as regionally networked and designed to deliver quality access to higher education for the whole State.

We believe that from our unique position here in Tasmania we can impact the world through the contributions of our staff, students and graduates. We recognise that achieving this vision is dependent on the people we employ, as well as creating a university that is values-based, relational, diverse, and development-focused.

Check out more here:

<https://www.utas.edu.au/jobs>

<https://www.utas.edu.au/careers/our-people-values-and-behaviours>

The intention of this position description is to highlight the most important aspects, rather than to limit the scope or accountabilities of this role. Duties above may be altered in accordance with the changing requirements of the position.

