

POSTDOCTORAL FELLOWSHIP: MARINE ISOTOPE BIOGEOCHEMISTRY

(Full-time 6 month contract)

Marine Biogeochemistry Lab, Department of Oceanography

Call for Applications

The Marine Biogeochemistry Lab (MBL) www.uct-mbl.co.za, based in the Department of Oceanography, is a world-class oceanic and atmospheric biogeochemistry laboratory established to address large- and small-scale research questions in marine and climate science. The laboratory is equipped with cutting-edge infrastructure, much of it unique on the African continent, that is available to support high-quality, high-visibility, and high-impact research. A central focus of the Marine Biogeochemistry Lab is high-sensitivity measurements of the nitrogen and oxygen isotopes of various nitrogen species, allowing for investigation of the marine nitrogen cycle, which is fundamental to understanding how our oceans work and are changing.

About the Postdoctoral Position

The MBL is seeking to appoint a dedicated Postdoctoral Research Fellow with experience in analytical marine biogeochemistry and isotope geochemistry to play a leading role in interdisciplinary research projects ongoing in the Marine Biogeochemistry Lab. The fellow will work on questions of nitrogen cycling and its implications for ocean productivity and greenhouse gas budgets in the equatorial, subtropical, and coastal ocean. They will be expected to conduct experiments to quantify rates of important biogeochemical processes, including under low-oxygen and low-nutrient conditions, and to analyse a range of biogeochemical parameters in the laboratory, including the nitrogen and oxygen isotope ratios of various dissolved and particulate nitrogen species. The Fellow will be based in the Department of Oceanography and will be advised by Associate Prof. Sarah Fawcett.

Key Requirements

- A PhD in oceanography or a closely related discipline (awarded within the last 5 years)
- The prospective Postdoctoral Fellow has not previously held comprehensive professional or permanent academic positions
- Strong background in experimental design and proficiency in applying analytical techniques related to marine biogeochemistry
- Experience conducting experiments and collecting samples at sea
- Experience with isotope ratio mass spectrometry and the calibration and interpretation of isotope data
- Experience working in low-oxygen and/or low-nutrient environments
- Demonstrated ability to collaborate on research projects
- Excellent interpersonal, planning, and organisational skills

Funding

The value of the Fellowship award is **R250 000 for 6 months with no additional benefits**. Postdoctoral Research Fellowships are exempt from taxation, meaning that Fellowships must be granted without fringe benefits. The Fellowship is offered for 6 months, renewable, up to a maximum of one year (funding dependent).

To apply:



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Send an email application to **Sarah Fawcett (sarah.fawcett@uct.ac.za)** with the subject "MBL Postdoctoral Fellowship" and **attach the following documents**:

- 1. Cover letter describing research experience, interests, and collaborative experience
- 2. Academic curriculum vitae with list of publications and conference presentations included
- 3. Certified transcripts of academic qualifications at the tertiary level
- 4. Contact details for 2 people willing to write reference letters

Closing date for applications: 20 June 2025

The University of Cape Town reserves the right to disqualify ineligible, incomplete and/or inappropriate application. The University of Cape Town reserves the right to change the conditions of award or to make no awards at all. The successful incumbent must be prepared to comply with the University's approved policies, procedures and practices for the postdoctoral sector.

For further information, please contact Associate Prof. Sarah Fawcett (sarah.fawcett@uct.ac.za)