



## POSTDOCTORAL FELLOWSHIP: NITROGEN CYCLING IN LOW OXYGEN MARINE ENVIRONMENTS

(Full-time, three-year contract)

Marine Biogeochemistry Lab, Department of Oceanography

### Call for Applications

The Marine Biogeochemistry Lab (MBL; [www.uct-mbl.co.za](http://www.uct-mbl.co.za)), based in the Department of Oceanography at the University of Cape Town, 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 that is available to support high-quality, high-visibility, and high-impact research. A central focus of the MBL 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 ocean function and change.

### About the Postdoctoral Position

The MBL is seeking to appoint a 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. A particular focus of this position is the production and cycling of nitrous oxide. The Fellow 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, particulate, and gaseous nitrogen species. The Fellow will be based in the Department of Oceanography and will be hosted 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, including collection and analysis of gas samples
- 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 is **R540 000 per annum 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 one year, renewable, up to a maximum of three years (funding dependent).

### To apply:

Send an email application to **Sarah Fawcett** ([sarah.fawcett@uct.ac.za](mailto: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 two people willing to write reference letters

### Closing date for applications: 31 January 2026

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.