Postdoctoral Research Fellowship in Coupled Physical-Biogeochemical Modelling of the West African Margin

Introduction

The Marine and Antarctic Research Centre for Innovation and Sustainability (MARIS), a UCT-accredited research unit administratively hosted in the Department of Biological Sciences, invites applications for the position of **Postdoctoral Research Fellow: Coupled Physical-Biogeochemical Modelling of the West African Margin.** MARIS is an interdisciplinary, multi-department and multi-faculty research unit, aggregator of competence and expertise that considers multiple bodies of knowledge (including academic and technological) in relation to societal benefits, with the overarching aim of producing knowledge and human capacity in marine and Antarctic research. The research is articulated into three foci, central to the UCT research strategy of Vision 2030: Antarctic and Southern Ocean, marine research on the southern African coast and shelf, and innovation in marine engineering. MARIS promotes and manages inter- and transdisciplinary marine research projects where more than one department is involved or where dedicated administrative expertise/effort is unavailable within any department. Administrative personnel, post-doctoral and research fellows are seen as shared assets in MARIS, independent of their formal positioning within the participating departments.

Call for Applications

The University of Cape Town (UCT) invites applications for a Postdoctoral Research Fellowship as part of **the West African Margin (WAM) project**, funded by **Schmidt Sciences LLC** as part of their Ocean Biogeochemistry Virtual Institute (OBVI) initiative (https://www.schmidtsciences.org/the-ocean-biogeochemistry-virtual-institute-obvi/).
The WAM project aims to understand the controls on oxygen, its variability along the West African margin, and its consequences for socio-economically important ocean ecosystems today and in the future. The successful candidate will contribute to the numerical modelling component led by WAM co-investigator Moagabo Ragoasha (UCT) and PI Laure Resplandy (Princeton University). The postdoctoral fellow will assist in model configuration and evaluations, model output interpretation, and knowledge transfer, participate in monthly project meetings with collaborators, and disseminate findings through peer-reviewed publications and conference presentations. The Fellow will be based in the Department of Oceanography and will be advised by Moagabo Ragoasha and Laure Resplandy.

Key Requirements

- A PhD in oceanography, atmospheric Science, applied mathematics, climate science, or a closely related discipline (awarded within the last 5 years)
- Experience with numerical ocean models and large dataset analysis.
- Experience in high-performance computing and coding (e.g., FORTRAN, MATLAB, R, Python, CDO, NCO or any other programming language)
- Strong communication and collaborative skills for working in a multidisciplinary team.
- Excellent communication (oral and written) in English.
- Applicants may not previously have held full-time permanent professional or comprehensive academic posts.

Funding

The value of the Fellowship award is **R480,000** per year for 36 months (3 years) with no additional benefits. Postdoctoral Research Fellowships are non-taxable, meaning fellowships must be granted without fringe benefits.

To apply:

Send an email application to **Siwapiwe Lamfiti (Siwapiwe.Lamfiti@uct.ac.za)** with the subject "MARIS 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: 25 February 2025

For further information, please contact Dr Moagabo Ragoasha (moagabo.ragoasha@uct.ac.za)

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.