

Postdoctoral opportunity in Biogeochemistry

Postdoctoral position to study Southern Ocean phytoplankton acclimation strategies to changes in trace metal availability:

The [Trace Metal Experimental and Biogeochemistry Group](#) within the [Department of Earth Sciences, Stellenbosch University, Western Cape, South Africa](#), invites applications for a postdoctoral position. The broader research project examines the biogeochemical cycling of marine trace metals and aims to better understand how the marine chemistry constrains the organisms and vice versa. The postdoctoral fellow will mainly conduct laboratory experiments on the adaptation and acclimation capacities of Southern Ocean phytoplankton to different environmental conditions, specifically changes in trace metal availability. Thus, preference will be given to applicants with expertise in laboratory algal cultures and their interaction with trace metals. Experience with phytoplankton cell isolation, photophysiology and molecular biology (“omics”) is an advantage. Experiments may also be conducted on board R/V SA Agulhas II to study in-situ the relationship between phytoplankton community structure and environmental conditions, including during wintertime and along the ice shelf. Thus, familiarity with work at sea is welcome, but is not a requirement.

Applicants should have a doctoral degree in a related discipline such as Earth Sciences, Chemistry, Biology, and a record of scientific research publications in scholarly journals relevant to this position. Postdoctoral activities will include cold, polar water strains maintenance, experiment design and implementation, data collection, and modelling, as well as dissemination of results in publications and presentations. The applicant may assist with future proposal preparation and will have the opportunity to advise graduate students and, to some extent, support undergraduate teaching and outreach activities. Opportunities for interdisciplinary research exist through collaboration with the other groups in South Africa (e.g., oceanography, biotechnology) and internationally (e.g., GEOTRACES community).

The position is for 24 months, commencing any time before July 2017. Renewal of the position for the second year is subject to performance. For further information about the project and to apply please contact Prof A Roychoudhury (roy@sun.ac.za) and Dr Susanne Fietz (sfietz@sun.ac.za). Applications should include, as a single pdf document, a cover/motivation letter, a comprehensive Résumé/CV and a research statement. Please also provide the names and contact information for three professional references.