

Convex Seascape Survey – Effects of seabed disturbances and protection on uptake and storage of seascape carbon, Postdoctoral Fellowship

About the Project

The South African component of the Convex Seascape Survey, a five-year, multi-partner, international collaborative investigation of blue carbon on continental shelves (<https://convexseascapesurvey.com/>) seeks to appoint a postdoctoral fellow to join the project team.

The overall aim of the project is to explore and quantify the nearshore ocean carbon sink, asking questions such as where is the carbon, how much is there, where did it come from and how is it affected by human activity? The particular questions to be investigated by the postdoctoral fellow could include quantifying seabed carbon stocks and sequestration rates in different muddy / fine sediment substrates to develop a representative seascape carbon map; and understanding potential interactions and effects of natural disturbance in highly dynamic sediment conditions in combination with human impacts such as anchor dragging and trawling on these carbon stocks. Carbon stock distributions and recovery may also be linked with benthic biodiversity patterns.

Academic Advisors

Prof Callum Roberts, University of Exeter

Dr Benjamin Harris, University of Exeter

Dr Jackie Raw, Nelson Mandela University / Anthesis South Africa

Prof Ronel Nel, Nelson Mandela University, South Africa

About the Position

The research will involve fieldwork from boats, both in South Africa and overseas, using a variety of techniques such as Remotely Operated Underwater Video, Baited Remote Underwater Video, scuba diving, seabed coring and sediment analyses as required. The postdoctoral fellow will join a growing international team of people working on various parts of the Convex Seascape Survey and there will be opportunities to interact with partners and collaborate across different project sites.

The postdoctoral fellow will be based at the Department of Zoology, on Nelson Mandela University's Summerstrand South Campus in Gqeberha, South Africa. There will also be scope to work on the Ocean Sciences Campus with the Institute of Coastal and Marine Research. Field work will be boat based and these activities as well as some laboratory work may be carried out with partners at the Oceanographic Research Institute in Durban, South Africa.

The postdoctoral fellowship will be fully funded for 3 years by the Convex Seascape Survey Project to commence no later than June 2024. The fellowship is awarded tax-free and will range from between R 250 000 – R 300 000 per annum commensurate with existing expertise aligned to the project. All other project costs, including costs for attending workshops and site visits, equipment, laboratory and sample processing costs are covered by the project fund.

Application requirements

Applicants for this fellowship must have obtained, or will have obtained by the start date, a PhD in an appropriate area of science or technology. Training will be offered in the relevant methods to be used, but experience in boat-handling, marine-based fieldwork and scuba diving would be advantageous. Similarly, applicants with experience working with sediments and benthic macrofauna samples are strongly encouraged to apply. Knowledge of ocean- or sediment carbon storage and sequestration processes would be highly beneficial.

A publication record demonstrating experience in quantitative statistical approaches and geospatial skills, including mapping, is also highly recommended.

How to apply

Please submit the following documents by email to Dr Jackie Raw jacqueline.raw@climateneutralgroup.com Include your name and “Convex Postdoctoral Fellowship Application” in the subject line:

- CV
- Letter of application (outlining your academic interests, prior research experience, and reasons that you wish to undertake this project)
- Academic Record providing full details of subjects and marks obtained for all degrees to date. A certified copy of your PhD certificate must also be included
- Two references from referees who are familiar with your academic work. These can be sent directly by the referees if preferred using your name and “Convex Postdoctoral Fellowship Application Referee Letter” in the email subject line.
- If you are not a national of a majority English-speaking country you will need to submit evidence of your proficiency in English.

The closing date for applications is midnight on 30 April 2024. Interviews will be held virtually shortly thereafter.

If you have any general enquiries about the application process as well as any project-specific enquires please email Dr Jackie Raw (jacqueline.raw@climateneutralgroup.com).