
Two field researcher positions available on sub-Antarctic Marion Island (March 2019 – May 2020)

Modelling wind patterns and their ecological impacts

Through funding from the South African National Antarctic Programme, two field researcher positions will be available as part of the annual overwintering expedition to the remote and isolated sub-Antarctic Marion Island. This project is examining wind as a driver of ecological patterns and processes, focusing on improving our understanding of the impacts of changing wind speed and direction in one of the windiest regions of our planet.

Posts: 2 x field researchers:

- Post #1: ecologist
- Post #2: engineer

Location: sub-Antarctic Marion Island

Salary: ± R190 000 (including benefits) for 14 months, depending on qualification level

Requirements:

- Candidates must have a minimum of a BSc (Hons) or a BEng (Hons) degree. Candidates completing their Honours degrees in December 2018 will also be considered. Degrees should be in a Biological or Environmental field (including, but not limited to, ecology, botany, zoology, geography, or entomology) or in Engineering (specializing in electronic, aeronautical or mechanical engineering).
- Candidates must be computer literate with extensive experience in data management and report writing. Advanced competency in MS Excel is essential, as successful applicants must be able to manage large electronic datasets.
- Candidates must be experienced with data analysis and competent with standard statistical software (i.e. evidence of at least a successfully passed undergraduate course in this or related subject). Competency in R and spatial analyses (or proven mathematical and programming skills) are highly preferable.
- Candidates with a biological studies background must have a good knowledge of terrestrial ecology (i.e. evidence of having passed a post-graduate ecology module and/or having conducted a research project on this topic). Candidates with Engineering degrees need to have experience working with data loggers and sonic anemometers, and should be familiar with Computational Fluid Dynamics modelling and the associated software.
- Candidates must have good organisational skills and must be meticulous in their work.
- Candidates must be physically fit, self-motivated, mentally strong and enthusiastic about research. Candidates must also be experienced with fieldwork, with previous experience working in physically challenging conditions (especially sub-Antarctic or high alpine conditions) being a distinct advantage.
- Experience working and navigating in remote and/or rugged environments is essential. Experience living and working with a small team also beneficial.

Recommendations:

- It will be highly beneficial for candidates with a biological studies background to have experience working with data loggers (including the installation, maintenance and monitoring thereof). Experience in the analysis of microclimatic data also beneficial.
- It will be highly beneficial for candidates with an engineering background to have an understanding of the fundamentals of terrestrial ecology.
- Experience in plant species identification, plant ecology techniques (including vegetation mapping, and monitoring plant performance), plant functional trait measurement, bryology, and/or any forms of wind modelling.

Expedition Requirements:

- Successful applicants will undertake fieldwork, sometimes for long hours, under very rigorous conditions (cold, wet and windy weather most of the time).
- Fieldwork will encompass c. 70% of the time on the island, with the remaining time dedicated to office and laboratory work, including management and analysis of data.
- The ability to work and live with small groups of people is essential. Note that the isolated conditions can be psychologically challenging for candidates and their families.
- Appointment to these positions is subject to a rigorous medical examination, which will be arranged at no cost to short-listed applicants.
- Successful applicants will spend 13 months (April 2019 to May 2020) on Marion Island. *There is no option to return before the end of the expedition – successful candidates will remain on the island for 13 months continuously.* The well-equipped research station has e-mail and telephone facilities, although periods without communication with the outside world are probable.

Duties:

- Setting up and maintaining microclimate loggers.
- Conducting vegetation surveys, mapping species distributions, and collecting samples.
- Running and maintaining field experiments.
- Note that duties may evolve during the course of the year.

Short-listed candidates will undergo rigorous competency tests to ensure adherence to requirements, specifically with regards to fitness, field skills, and data management and processing. Preference will be given to equity candidates.

This position is open only to South African applicants. Applicants should send their **detailed CV** together **with a cover letter** indicating eligibility for the post, **a list of three potential academic references**, and **certified copies of qualifications and ID** via email to Dr Peter le Roux (peter.leroux@up.ac.za; Department of Plant and Soil Sciences, University of Pretoria). For queries contact Dr le Roux by email or by phone (012 420 6761).

Interviews will be conducted early in December 2018, and short-listed applicants should be willing to travel to Pretoria for interviews and competency tests. All travel costs to the island, and all living costs on the island, are covered by the project.

Closing date for applications: 15 November 2018
