



The Department of Science and Technology, and the National Research Foundation have introduced the Professional Development Programme (PDP) aimed at training South African Doctoral students and Postdoctoral Research Fellows. Under the DST Professional Development Programme (PDP), the NRF SAEON national Office, administered through the Grassland, Forest and Wetlands Node, invites applications from suitably qualified individuals for the positions of:

### **Postdoctoral Fellow (1 position)**

The **South African Environmental Observation Network (SAEON)** is a research platform funded by the Department of Science and Technology and managed by the National Research Foundation. SAEON is mandated to establish and manage long-term environmental observatories; maintain reliable long-term environmental data sets; promote access to data for research and/or informed decision making; and contribute to capacity building. The mandate is executed through six geographically distributed nodes that are coordinated by the SAEON National Office in Pretoria.

The available research project is:

#### **Projecting climate change impacts on plant species and communities in the Maloti-Drakensberg mountains through examination of plant-environment relations.**

The Maloti-Drakensberg is a centre of plant endemism whose plant diversity may be threatened by global change. The general aim of the project is to address the question of the possible nature of species loss and re-organisation of communities in the face of climate change and CO<sub>2</sub> loading at a landscape to local scale. This project is intended to use statistical modeling techniques to examine current relations between environment and the distribution of species and communities in a spatially explicit manner. Some specific foci will be the potential availability of climate refuges at high altitude, possible conflicting effects of climate change versus CO<sub>2</sub> loading on C<sub>3</sub> versus C<sub>4</sub> plants, and topographic constraints on altitudinal adjustment of species distributions. The study will examine regional to local landscape scales using existing data sets for the former and targeted field exercises for the latter. Most of the field work will be conducted in the Cathedral Peak area of the Maloti-Drakensberg.

The candidate will collaborate with SAEON partners from the University of KwaZulu-Natal and from Ezemvelo KwaZulu-Natal Wildlife, as well as with other SAEON nodes undertaking similar work.

**The minimum requirement for a postdoctoral applicant is** a PhD (received within five years of this application) with a focus in Botany or in Plant Ecology.

Candidates should demonstrate knowledge of the flora of grasslands, experience with fieldwork, good knowledge and experience of statistical modelling, preferably modelling of species distributions, analysis of community data, and a basic competency in Geographic Information Systems. Candidates would need to be prepared for physically demanding fieldwork under challenging conditions. A driver's license is mandatory and experience with four-wheel driving is desirable.

**Candidates should be available to start by the 1<sup>st</sup> October 2014 but could start earlier.**

Successful applicants for the **Postdoctoral Fellows** positions will each receive a market-related stipend paid on a monthly basis. These positions are offered as one year contract appointments with the possibility of a renewal up to two years depending on funding availability, research progress and research output.

Applicants should submit a detailed CV, the names and contact details of three references, a copy of their SA ID document, and a covering letter summarising the reason for applying and motivating why they are well suited to take up position, to Dr Tim O'Connor (tim@saeon.ac.za; 033 347 5201). A completed NRF application form must accompany your application. Forms can be downloaded from the SAEON webpage [www.saeon.ac.za](http://www.saeon.ac.za).

**Closing date: 31 July 2014.**

**SAEON reserves the right to withdraw the advertisement should a suitable candidate be found earlier.**

SAEON is committed to employment equity and redress. Preference will be given to South African candidates. SAEON reserves the right not to make an appointment to the position as advertised. Only successful applicants will be contacted.