POST-DOCTORAL OPPORTUNITY

(within the Professional Development Programme)

SAEON Fynbos Node

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.

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 SAEON Fynbos Node (www.saeon-fynbos.org) seeks to appoint a Postdoctoral Fellow with competency in aspects of plant water relations and/or catchment hydrology for their research programme on global change impacts on ecosystem structure, composition and function in the Cape Floristic Region. The post will be based at the Fynbos Node in Cape Town but candidates may be affiliated to any suitable local university depending on project requirements.

Postdoctorate in Ecohydrology: Global change impacts on the ecohydrology of a megadiverse vegetation system.

A key focus of the Fynbos Node is the ecohydrology of fynbos vegetation at different spatial and temporal scales. We are interested in identifying global change impacts on fynbos, the dominant vegetation of mountain catchments, which may directly or indirectly influence streamflow. SAEON is working on the historic Jonkershoek catchment experiments, maintaining long-term monitoring of streamflow and climate variables and expanding the monitoring array. The Jonkershoek catchment experiments have produced seminal work on the effects of land cover change on streamflow. Opportunities exist for comparing hydrological processes in the past with the present to identify change and their possible causes, and to study fynbos ecohydrology at scales ranging from the hydrological behaviour of individual species, communities, landscapes or regions. Historic data are available for analyses and equipment (e.g. micrometeorological arrays, eddy covariance tower) will be available for field observation.

The successful candidate will develop a research project aimed at exploring the ecohydrology of fynbos in a changing world. The candidate will be expected to publish on this research in the scientific literature and to contribute to developing robust monitoring systems for the future.

The Postdoctoral Fellow will form part of a team using various approaches (vegetation surveys, studies on plant traits and coexistence, evolutionary history and phylogeny, hydrological monitoring, remote sensing and dynamic modeling) to understand the impacts of global change on the Cape Floristic Region.

Minimum requirements: A PhD in Botany, Ecology, Hydrology or Earth Systems (if not yet in possession of a PhD, candidates must present evidence that their PhD will be completed by December 2014). Candidates should demonstrate skills in plant ecophysiology and/or hydrology, with experience in fieldwork, installation and application of instrumentation, and/or good knowledge and experience of dynamic modeling.

Additional competencies in Geographic Information Systems, remote sensing, statistics and R or a knowledge of the flora of the Cape Floristic Region will be a major advantage.

The Postdoctoral position is offered as a one year contract appointment renewable up to a maximum of three years in total depending on availability of funds, research progress and research outputs by the PDP fellowship-holder. R315 000 pa is available to the postdoctoral fellow.

Candidates should be available to start on or before the 1st January 2015.

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 Nicky Allsopp (allsopp@saeon.ac.za, 021 799 8836). A completed NRF application form must accompany your application. Forms can be downloaded from the SAEON webpage www.saeon.ac.za.

Closing date: 25 September 2014.

SAEON is committed to employment equity and redress. Preference will be given to South African citizens but if you are a South African permanent resident you are also welcome to apply. SAEON reserves the right not to make an appointment to the position as advertised. Only short-listed applicants will be contacted.