



Postdoctoral Researcher in Plant Functional Traits & Process-Based Modelling

University of the Witwatersrand, Johannesburg in collaboration Forestry Sector Partners

We invite applications for a **funded Postdoctoral Researcher position** in a collaborative research project focused on hydraulic trait variation in forestry trees and their integration into a process-based model of plant function. This project is crucial in predicting the performance of forestry genotypes under changing climatic conditions.

Project Overview

The project aims to quantify key functional traits associated with plant hydraulic function in forestry genotypes. You will be based at **Wits in Johannesburg**, while measurements will be conducted at an open-air forestry laboratory at the **University of Pretoria**.

Role & Responsibilities

As a Postdoctoral Researcher, you will:

- Lead functional trait quantification and its integration with modelling
- Work with physiological datasets for calibration and validation
- Contribute to drought experiment design
- Lead manuscript preparation and publication strategy
- Co-supervise PhD students and contribute to lab development

Candidate Profile

We seek applicants with:

- Strong knowledge in **Plant Physiology** (primary skill)
- Experience in **process-based modelling of vegetation** or ecosystems (secondary skill)
- Familiarity with **functional trait biology**, **eco-hydrology**, and **quantitative ecology or biophysics** is advantageous
- **Quantitative analysis or modelling skills** (such as competence in R or Python) are beneficial

As the position is based in South Africa, preference will be given to candidates from **South Africa or other suitably qualified candidates, who are willing to relocate**.

Funding & Duration

The Postdoctoral position is funded for **1 year**, offering a stipend commensurate with experience and available funding. Extensions for a second year may be considered based on exceptional performance.

How to Apply

To apply, email a single PDF containing your cover letter, CV, contact details for two references, and academic transcripts to Prof Rob Skelton, Prof Mary Scholes, Dr Yolandi Ernst and Dr Caroline Hardy at the following email address: caroline.hardy@wits.ac.za

Application Deadline

We will start to consider applications on **31 March 2026** and will continue to consider applications until an appointment is made.

Join an emerging research program at the University of the Witwatersrand focused on plant hydraulics, drought physiology, and functional traits, and make a significant impact on forestry research!