## COLLEGE OF AGRICULTURE, ENGINEERING AND SCIENCE

**RESEARCH ASSISTANT (1 POST)**
**ONE YEAR FIXED TERM APPOINTMENT**
**SCHOOL OF AGRICULTURAL, EARTH & ENVIRONMENTAL SCIENCES**
**PIETERMARITZBURG CAMPUS**

**REF NO.: ENVS-RA-01/2025**

We are seeking a numerical scientist with an interest in palaeoecology and long-term ecosystem dynamics for a Research Assistant position based in the University of KwaZulu-Natal (UKZN) Palaeoecology Laboratory on the Pietermaritzburg Campus. This position is part of a larger multi-disciplinary research project funded by the Global Research Council via the Chinese Academy of Sciences and National Research Foundation Sustainable Development Goals (SDGs) Project (Grant Number LT240524220338): *Defining achievable targets for ecosystem restoration and sustainability*.

The appointee will leverage existing regional palaeoecological datasets from South Africa to evaluate landscape process vulnerability, path-dependency, and resilience. The primary objective will be to model the historical range of variability and trajectories of ecosystem change, including magnitude, rate of change, and tipping points, in key ecological and environmental processes. Research outputs will be used to develop a tool-kit with stakeholders for defining realistic restoration targets, explore future scenarios under different combinations of land use and climate change, and define potential management interventions for desired scenarios.

The project aims to inform restoration targets by integrating paleodata, archaeological and historical records to provide evidence-based solutions for achieving SDGs. The project is a collaboration between UKZN, the Chinese Academy of Sciences, the University of York and Netherlands Institute of Ecology.

The incumbent will be based at the UKZN Palaeoecology Laboratory and will report to Prof. Jemma Finch. The incumbent will also work closely with a strong international network of researchers including Prof. Ke Zhang (Chinese Academy of Sciences), Prof. Lindsey Gillson (University of York), Prof. Suzanne McGowan (Netherlands Institute of Ecology), and Dr Kelly Kirsten (Coventry University). The research will further contribute to the objectives of the [PAGES Planetary Boundaries Working Group](#).

The candidate must be willing to undertake an extended research stay at the Chinese Academy of Sciences in Nanjing, where they will work closely with numerical scientists focused on the equivalent analysis of the Yangtze River Delta. As part of the successful candidate's professional development, the opportunity to participate in limited supervision of senior students in the Department will be offered.

**Minimum Requirements:**
- PhD degree in quantitative modelling of palaeoecological data
- Experience in quantitative modelling and proficiency in R is essential
- Publication record with a minimum of five peer reviewed publications, demonstrating evidence of lead authorship and palaeoecological research focus
- Evidence of software development

Enquiries and details regarding this post may be directed to Professor J. Finch via email: finchj@ukzn.ac.za

The Research Assistant position is available immediately. The position is for 12 months, and renewable for up to 36 months.

Applicants are required to submit the following, as a single combined PDF document:

(i)     a covering letter highlighting their experience in meeting each of the minimum requirements as listed above
(ii)    a detailed CV including list of publications
(iii)   a certified copy of the applicant's doctoral degree certificate or PhD award letter
(iv)   a certified copy of the applicant's ID / permanent residency document / successful international applicants will need to apply for relevant permits
(v)    In addition, please ask 3 referees to email references directly to Jemma Finch finchj@ukzn.ac.za

**The remuneration package offered does not include benefits.**

**The closing date for receipt of applications is 29 April 2025.**

**Applications may be sent to Mrs Shanitha Ramroop** RamroopSH@ukzn.ac.za

**Please state the advert reference number in your subject line**.

**The School and the University reserve the right to not appoint and/or stop the recruitment process at any stage.**