

**The University of KwaZulu-Natal (UKZN) is committed to meeting the objectives of Employment Equity to improve representivity within the Institution. Preference will be given to applicants from designated groups in accordance with our Employment Equity Plan.**

**RESEARCHER  
67% FRACTIONAL APPOINTMENT  
FIXED TERM/FRACTIONAL APPOINTMENT TO 31 MARCH 2026  
CENTRE FOR WATER RESOURCES RESEARCH  
SCHOOL OF AGRICULTURAL, EARTH AND ENVIRONMENTAL SCIENCES  
PIETERMARITZBURG CAMPUS**

**REF NO: AEES20/2022**

The Centre for Water Resources Research seeks to appoint a suitably qualified researcher to lead, manage and undertake externally funded research contracts. The project is focusing on hydrological modelling for the development and assessment of a system for producing annual water resource accounts on a national scale in South Africa. The incumbent will also contribute to other water related research projects.

The incumbent will be the project leader and responsible for the management and execution of the above research project, internal and external communication, delivering on contract outcomes, project budget control and reporting to funders. In addition, the incumbent will be expected to research activities in the CWRR, publish peer-reviewed journal articles, supervise postgraduate students, draft research proposals and secure externally funded research contracts, and deliver specialist lectures in the Hydrology programme.

The incumbent should have qualifications, training, and extensive experience in large, national scale hydrological modelling using the ACRU Model, preparation and working with large national scale climate datasets, use of GIS for model configuration, parameterisation and analysis of results, in-depth knowledge of the interactions between land use/cover, soil properties and hydrological responses, data analytical skills and basic programming skills.

The incumbent will report to the Director of the Centre for Water Resources Research.

**Minimum Requirements:**

- A Master's degree in hydrology, bioresources engineering/systems or related environmental science.
- At least two-year experience in the use of national scale hydrological modelling using the ACRU model, including model parameterisation, execution, assessment and interpretation of simulated results.
- At least one year of experience in working with national scale land cover and soils datasets.
- Experience with software development (e.g. Excel VBA, R, Python, Java, Fortran).
- Evidence of technical report writing and publication of research results in peer reviewed ISI/DoHET accredited journals.
- Evidence of leading, managing and successfully completing at least one externally funded research project with partners from multiple institutions.

Enquiries regarding the full details of the post and associated duties may be directed to Professor Jeff Smithers, email: [smithers@ukzn.ac.za](mailto:smithers@ukzn.ac.za)

**The remuneration package offered includes benefits.**

**The closing date for receipt of applications is 28 October 2022.**

**Applicants are required to complete the relevant application form which is available on the Vacancies page of the University website at [www.ukzn.ac.za](http://www.ukzn.ac.za). Completed forms with CV's may be sent to [recruitment-aes@ukzn.ac.za](mailto:recruitment-aes@ukzn.ac.za). Please state the advert reference number in your subject line.**

*Kindly note that the University of KwaZulu-Natal ("the University") is required to process any Personal Information (as defined by the Protection of Personal Act, 2013 "POPIA") submitted by candidates when applying for positions at the University. The University will endeavour to ensure that the appropriate security measures are in place and implemented for both electronic and paper-based formats that are used for processing of the personal information recorded through this recruitment and selection process. We refer you to the University's relevant Section 18 notice at [http://vacancies.ukzn.ac.za/Libraries/General\\_Documents/Section\\_18\\_Notice\\_-\\_Employees\\_and\\_Potential\\_Employees.sflb.ashx](http://vacancies.ukzn.ac.za/Libraries/General_Documents/Section_18_Notice_-_Employees_and_Potential_Employees.sflb.ashx)*