

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

**COLLEGE OF AGRICULTURE, ENGINEERING AND SCIENCE**

**POST-DOCTORAL FELLOWSHIP (1 POST)  
1 JANUARY 2024 – 31 DECEMBER 2025  
SCHOOL OF ENGINEERING  
HOWARD COLLEGE CAMPUS**

**REFERENCE NO.: EFML/01/2023**

The Post-doctoral Fellowship opportunity is available to support the research activity: “*Construction Impacts of Bulk Water Supply Schemes on River Connectivity*” in the Environmental Fluid Mechanics Lab within the School of Engineering and Aquatic Ecosystem Research Lab in the School of Life Sciences. This interdisciplinary post is attached to an applied project around constructing a fishway and macroinvertebrate ramp on the lower uMkhomazi River in South Africa.

The incumbent is expected to plan, manage and oversee field-based and lab-based research activities on the influence of the construction of a Bulk Water Transfer Weir on instream flows and aquatic biodiversity. S/he will develop Passive Integrated Transponder technology locally to track fish through the fishway structure, possibly including aquatic macro-invertebrates. Further, s/he will perform data analyses and modelling using robust statistical methods using various computational programming (for example, but not limited to R and Python)

The incumbent will report to the Heads of the Environmental Fluid Mechanics Lab and Aquatic Ecosystem Research Lab.

**Minimum Requirements:**

- A PhD in Engineering, Physics or Ecological Sciences related degree obtained within the last five years.
- Relevant research experience/exposure in experimental Physics, Electrical/Electronic Engineering and/or Fluid Mechanics and/or fish passage-related studies.
- Experience in data analyses and programming (for example, but not limited to R and Python)

The postdoctoral fellowship is for two (2) years (with an option to renew for an extra one (1) year), worth R250,000 per annum and will be based at UKZN. This is funded through the project: *Construction Impacts of Bulk Water Supply Schemes on River Connectivity*

Applicants are required to submit the following documents in a single pdf to [pringlej@ukzn.ac.za](mailto:pringlej@ukzn.ac.za).

- (i) a cover letter highlighting their experience in meeting each of the minimum requirements listed above.
- (ii) a detailed CV including the list of publications
- (iii) contact details for three referees

- (iv) a certified copy of the applicant's doctoral degree certificate or Ph.D. award letter/relevant evidence of pending completion.

Enquiries and details regarding the post may be directed to the Environmental Fluid Mechanics Lab leader Dr Justin Pringle, email: [pringlej@ukzn.ac.za](mailto:pringlej@ukzn.ac.za). Tel. 031 260 1151

**The closing date for receipt of applications is Wednesday, 15 November 2023**

**Late applications will not be considered. Successful individuals will be contacted accordingly. Should you not receive a reply or update by 20 December 2023, kindly consider that your application has not been successful. The University reserves the right not to make an appointment to this advertisement.**

*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>*