

Work@EBIT

# Postdoctoral fellow

Department of Architecture

Research Theme: Regenerative and Resilient Cities

Closing date: 30 January 2024

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*Image: Calayde Davey & OpenAI*



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Faculty of Engineering,  
Built Environment and  
Information Technology

Fakulteit Ingenieurswese, Bou-omgewing en  
Inligtingstechnologie / Lefapha la Boetsenere,  
Tikologo ya Kago le Theknolojisi ya Tshedimošo

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## THE OPPORTUNITY

The University of Pretoria's Department of Architecture is seeking a Postdoctoral Researcher to join their team in the development and management of a pioneering interdisciplinary testing facility. This facility aims to improve the climate change resilience of multi-storey residential buildings in Tshwane, South Africa, through the implementation of smart, flexible facade systems. The successful candidate will collaborate with industry professionals, faculty members, and potential project partners to design and develop the testing facility, conduct research on flexible facade articulation in the South African context, and establish protocols for the project.

Contract period:  
24 months (starting 2024)  
*Renewal for 2025 will be contingent on satisfactory academic progress.*

Remuneration:  
±R 250 000/year, tax free  
*Does not include any benefits*

## THE PROJECT

The project's overarching goal is to create a real-life prototype that monitors and documents the impacts of climate change and its influence on multi-storey residential buildings. By developing the testing facility, the project aims to simulate and test various building solutions to enhance local climate change resilience. The successful candidate will play a crucial role in Phase 1 of the project, focusing on establishing the interdisciplinary testing facility and integrating data management and storage systems with the physical test site's digital model.

## THE PERSON

To be eligible for the position, candidates must be under the age of 40, hold a Ph.D. in Architecture or Architectural Engineering awarded within the past five years, and preferably have residency rights in South Africa. Proficiency in building performance modelling, the use of relevant software such as IESve or DesignBuilder, and BIM or similar drafting/modelling programs is essential. Proficiency in English and strong communication and cross-disciplinary collaboration skills are essential, and a track record of scholarly publications and background in building performance modelling, sustainable design and bioclimatic design will be advantageous.

## RESPONSIBILITIES

The Postdoctoral Researcher's responsibilities include conducting independent research, collaborating with the project team, engaging relevant stakeholders, publishing research findings, and contributing to grant writing and project management.

For more information or to apply:

Dr Jan Hugo, Department of Architecture, University of Pretoria, South Africa, [jan.hugo@up.ac.za](mailto:jan.hugo@up.ac.za)



In applying for this post, please attach:

Letter of application outlining relevant qualifications and experience | comprehensive CV with a list of publications and previous research activities | copies of academic transcripts | a relevant thesis (if applicable) | two letters of reference from academics who have supervised or worked alongside the applicant