



**Tshwane University
of Technology**

We empower people

**DEPARTMENT OF CHEMICAL, METALLURGICAL
AND MATERIALS ENGINEERING**

POSTDOCTORAL RESEARCH FELLOWSHIP ADVERT

Energy Solutions for Sustainable Living R&D Platform

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2022 TUT POSTDOCTORAL RESEARCH FELLOWSHIP CALL

The Tshwane University of Technology intends to increase its research outputs and throughput of postgraduate students, strengthen supervision, and add to its number of postdoctoral research fellows to significantly expand its research base. To accomplish this, the University hosts a Research and Development Platform on Sustainable Energy (Energy Solutions for Sustainable Living). The R&D platform seeks to appoint academically brilliant Postdoctoral Research fellow in pursuance of these institutional goals.

APPLICANTS RESEARCH FOCUS AREA:

- ✦ Sustainable energy

MINIMUM REQUIREMENTS

- ✦ Applicants must have a PhD/DEng/DTech in Engineering or related field with specialisation in Sustainable Energy or Advanced Engineering Materials.
- ✦ Young black female applicants will be given preference.

PREFERRED EXPERTISE

- ✦ Good knowledge in energy materials' development to address targeted societal challenges.
- ✦ Understanding of the mechanisms of energy storage in various energy storage technologies.
- ✦ Eager to work on electrolyser for green hydrogen production and storage.
- ✦ Ability to interpret morphological and compositional results using SEM, TEM, XRD, etc.
- ✦ Experience in modelling and simulation using COMSOL Multiphysics, Matlab, etc.

VALUE OF FELLOWSHIP

- ✦ R250 000 per annum

CONDITIONS OF THE FUNDING FOR POSTDOCTORAL RESEARCH FELLOWSHIPS

- ✦ The fellowship is for three years, with annual renewal dependent on excellent performance and the availability of funds.
- ✦ South African citizens / SA permanent residents / foreign citizens can apply.
- ✦ A proven track record of research publications in accredited journals in Energy-related fields.
- ✦ Fellowship funding may not be held concurrently with another fellowship from any other government sources (NRF, etc.) and any full-time salaried employment.
- ✦ Postdoctoral fellows may hold non-binding supplementary grants or rewards to the institutional capped value.
- ✦ Postdoctoral fellows will be provided with opportunities for travel to present papers at conferences, both local and international and attend workshops.
- ✦ Postdoctoral fellows will be expected to submit progress reports as per the institutional guidelines.
- ✦ The Doctoral qualification should be younger than five years at the time of application.
- ✦ Postdoctoral fellows will be based at TUT full-time for the duration of the fellowship, and should not be employed (full-time or part-time) during the tenure of the fellowship.

Interested candidates may send their detailed CVs and supporting documents (certified copies of qualifications and proof of identity documents) to: MokaeML@tut.ac.za.

Enquiries: Prof Patricia Popoola (PopoolaAPI@tut.ac.za).

Contact telephone number: +27 (0) 12 382-3513.

Closing date for applications: **17 September 2022**