

## 2022/23 TUT POSTDOCTORAL RESEARCH FELLOWSHIPS 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 Faculty of Engineering and the Built Environment invites applications from prospective Postdoctoral Research Fellows who will be based within the Sustainable Energy Platform (Energy Solutions for Sustainable Living) in the Department of Chemical, Metallurgical and Materials Engineering.

### Conditions of the funding for Postdoctoral Research Fellowships

- Postdoctoral Research Fellowship funding may not be held concurrently with another fellowship from any other government sources (NRF, etc.) and any full-time salaried employment.
- Postdoctoral Research Fellowship may hold non-binding supplementary grants or rewards to the institutional capped value.
- Postdoctoral Research Fellowship 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 Postdoctoral Research Fellowship.

### General eligibility criteria for Postdoctoral Research Fellowships

- Postdoctoral Research Fellowship funding will depend on the availability of funds.
- Applicants must have obtained their doctoral degree within five (5) years of submitting an application (a PhD awarded in 2020, 2021 and 2022 will receive preference).
- Postdoctoral research fellowships are open to South African citizens or permanent residents and foreign citizens, from the continent and other countries, intending to undertake postdoctoral research at the Tshwane University of Technology.
- Applicants must have proven track record of research publication in accredited or peer-reviewed journals.
- Applicants must attach certified copies of their identity document or passport; proof of their master's and doctoral qualifications; certified copy of the SAQA evaluation certificate (for international PhD qualifications); and for those who are still in the process of completing their doctoral degree, a letter of confirmation of completion of doctoral qualification from their institution.

### Research interests in the following fields/areas:

- 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.

### Minimum requirements:

- Doctoral degree with a research focus in the relevant field of study.

### Value of fellowship

- R250 000 per annum.

Reporting - For continuous monitoring of progress, the awardees will be required to submit a Progress Report to the host in the ninth month of the Postdoctoral Fellowship.

Interested candidates may submit the following documentation to [NgakaRM@tut.ac.za](mailto:NgakaRM@tut.ac.za):

- A detailed CV.
- Certified copies of all relevant qualification certificates.
- Certified copy of the SAQA evaluation certificate (for international PhD qualifications).
- Certified ID or passport copy.
- A one-page indication of the research project that you wish to pursue during the Postdoctoral Research Fellowship.

**Enquiries:** Ms Refilwe Ngaka, telephone +27 12 382 3550.

Closing date for applications: 16 September 2022.