



#### **VISION**

##### **Shape and own the future**

To be a transforming, equitable, sustainable, and academically excellent University of Technology anchored in its communities.

#### **MISSION**

To offer technological, career-directed educational programmes focussing on the innovative problem-solving research and engage with government, business, industries and communities as end-users.

### **FACULTY OF ENGINEERING DEPARTMENT OF ELECTRICAL ENGINEERING**

#### **POSTDOCTORAL RESEARCH FELLOWSHIP (Thermo-mechanical energy storage technologies)**

#### **One-Year Fixed Contract**

#### **Key Performance Areas:**

- Collaborate with other researchers for the development of cost-effective Thermo-mechanical Energy Storage (TMES), especially compressed air energy storage.
- Write funding proposals or projects in energy management and renewable energy.
- To prepare and publish manuscripts of high quality in DHET accredited journals.
- To support the research areas and/ or projects of the supervisor they have been allocated to (by means of active research).
- Manage data resulting from the TMES research development.
- Ability to co-supervise relevant postgraduate research and/or collaborating with other postdoctoral fellows.
- Involvement in initiating and managing research projects.
- Assisting in overall management and contribute to the various activities of the Research projects.
- To assist in any relevant assignments as required by their supervisor.

#### **Minimum Requirements:**

- A Doctoral Degree in Electrical Engineering with background in Mechanical Engineering, or Doctoral in Mechanical Engineering with background in Electrical Engineering, obtained within the past 5 years.
- International Postdoctoral Research Fellows must have a long-term visitor's visa endorsed for academic activities affiliated with MUT (Section 11(1)(b) Visitors Visa).

- Published least 2 journal papers (DHET) in optimization of energy systems in the last 5 years.
- Has not held full-time permanent academic or professional employment.

**Competencies:**

- Ability to work independently, develop projects, undertake research and meet deadlines.
- Excellent social and team working skills.
- High ethical standards; Innovative and Conscionable.
- Organizational skills.
- Fluent in written and spoken English.

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**Stipend:** R300 000.00 per annum (tax-exempt).

Interested applicants should send (a) a motivation detailing the extent to which they meet the requirements of the position; (b) an application form (downloadable from [www.mut.ac.za](http://www.mut.ac.za)); (c) a Curriculum Vitae including a list of research publication, conference papers, and other scholarly outputs; (d) certified copies of academic qualifications plus academic records and proof of professional registration with a relevant professional body where applicable. **(Please provide academic transcripts and SAQA evaluation certificate, if qualifications were obtained outside South Africa)**; and (e) names of three contactable referees at email: [hr@engineering.ac.za](mailto:hr@engineering.ac.za) copied [numbib@mut.ac.za](mailto:numbib@mut.ac.za)

**Enquiries: 031 909 7236**

**Closing Date: 09 August 2024**

**Mangosuthu University of Technology 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 targets including people with disabilities.**