



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.

DEPARTMENT OF CHEMICAL ENGINEERING

POSTDOCTORAL RESEARCH FELLOW:

(Renewable Energy Generation Through Reverse Electrodialysis)

One-Year Fixed Contract

Key Performance Areas:

- Interact with collaborators to design experiments and develop reverse electrodialysis-based processes for electricity or hydrogen production.
- Publish manuscripts in reputable journals and peer-reviewed conference proceedings in this field.
- Explore the possibility of producing electricity using reverse electrodialysis for landlocked regions.
- Manage an internal database containing the results of laboratory experiments, process modelling and process simulations.
- Co-supervise relevant postgraduate research and/or collaborating with other postdoctoral fellows.
- Be involved in initiating and managing research projects.
- Assist in overall management and contribute to the various activities of the Research projects.
- Initiate, develop and/or be involved in research networks, collaborations (i.e. formulating spin-offs, and joint ventures), institutional partnerships, and the organization of research events.

Minimum Requirements:

- A recently earned PhD in Chemical Engineering. At the time of the award, the candidate should have graduated with his/her doctorate degree no longer than within the previous five years.
- South African citizens and permanent residents will have priority.
- 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)
- Has not held full-time permanent academic or professional employment.
- A solid knowledge of electrochemical engineering processes
- At least 3 published papers related in the last 24 months.
- Established track record of publications and/or conference contributions related to the outlined research areas.
- Experience in postgraduate student mentorship.
- Working knowledge and experience with technical software such as Matlab, Comsol and Aspen Plus.

Competencies:

- Excellent oral and written communication skills.
- Excellent interpersonal and organizational skills.
- Coherent use of multiple computational approaches

Salary Scale: R300 000.00 basic salary per annum – with no benefits

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); (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@mut.ac.za copied tumba@mut.ac.za

Enquiries: Tel: (031) 907 9294 / 907 7447

Closing Date: 15 March 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.