ADVERTISEMENT

SCIENTIST/ENGINEER: PRESSURE, VACUUM & FLOW METROLOGY X2

Salary Range (R 437 083.97 – R 514 217.49)

OVERVIEW OF THE ORGANISATION

The NMISA is a Type 3A Public Entity established in accordance with the Measurement Unit and Measurement Standards Act, No. 18 of 2006 (the Act). The NMISA is mandated by the Act to provide for the use of the international system of units (the SI) and other measurement units in South Africa, to maintain national measurement standards (NMS) and to determine and ensure the comparability of the NMS. More information can be obtained from www.nmisa.org.

PURPOSE OF THE ROLE

To research, develop, realise, and maintain National Measurement Standards for pressure, vacuum and flow measurements, and disseminate traceability from these standards to industry, thereby supporting South African trade and air monitoring framework.

MINIMUM REQUIREMENTS, SKILLS AND EXPERIENCE

- At least BSc Physics or BEng Mechanical/Electrical/ Mechatronics Engineering.
- At least one year experience in metrology accredited laboratory.
- Knowledgeable on the realization, maintenance and disseminating of national measurements standards and related systems in the metrology field.
- Demonstrated experience in providing sustained excellence in customer service (calibration/measurements of industrial equipment).
- Experience in analysis of data, making corrections based on physics and statistical information.

- Ability to communicate precisely and concisely in a scientific context, to construct sound arguments supported by science principles and technical tangible evidence and accurately evaluate the reliability of conclusions reached.
- Working knowledge of ISO/IEC 17025
- The following would be an added advantage:
  - An understanding of GUM and the Estimation of Measurement Uncertainty
  - Experience in technical report writing

DUTIES AND RESPONSIBILITIES INCLUDE, BUT ARE NOT LIMITED TO:

- Operate equipment to perform gas flow and pressure measurement.
- Operate computer-assisted engineering or design software to control equipment and perform measurements.
- Maintain measurement standards, equipment and devices.
- Generate calibration procedures.
- Calibrate measuring equipment, prepare calibration certificates and uncertainty budgets, verify conformance to specifications for NMISA and external customers.
- Analyse raw data, making computations as necessary using computers, to determine calibration measurement result.
- Maintain a laboratory quality system including records, plans, procedures, problem identification, root cause analysis and corrective actions.
- Participate in inter and intra-laboratory comparisons to demonstrate ongoing equivalence of the gas flow standards and metrologist skills.

The individual best suited to this position will display professionalism when dealing with customers and colleagues and a level of excellence that goes above and beyond the commercial considerations and legal requirements.

Please note:

How to apply – please read carefully (non-compliant applications will not be considered):

Email your application to **Careers3@nmisa.org**, using this exact subject line: **"scientist/engineer: pressure, vacuum & flow metrology x2".** Submit only one application per person for this position.

You must attach **THREE separate PDF documents – do not combine them into one file**. Name each file using **exactly these labels – CV, ID, Qualifications – as "Surname Name – Label"**, for example:

- Your CV – e.g. "Mokoena Thandi – CV.pdf"
- A certified copy of your ID – e.g. "Mokoena Thandi – ID.pdf"
- Your qualification certificate(s) – e.g. "Mokoena Thandi – Qualifications.pdf"

Format rules (applications that do not follow these will not be considered):

- All three documents must be in **PDF format**. Word documents, photographs, JPEG/image files, and links (Google Drive, OneDrive, Dropbox) will not be accepted.
- Your CV must be a proper PDF created from a document (for example, "Save as PDF" from Word) – not a scan or a photograph – and your full name, cell number and email address must appear at the top of the CV.
- Your certified ID and qualification certificate may be scanned, but must be clear, legible PDFs.

Only applications that include all three documents, correctly named and in the correct PDF format, will be considered.

Closing date for applications: 12 November 2026

The NMISA subscribes to and applies the principles prescribed by the Employment Equity Act. Preference will be given to previously disadvantaged candidates who meet the requirements and who will add to the cultural and gender diversity of the organisation. People with disabilities are encouraged to apply. Correspondence will be limited to shortlisted candidates only. The NMISA reserves the right not to appoint.

By applying for this position at the NMISA, the applicant understands, consents and agrees that the NMISA may solicit a credit and criminal report from a registered credit bureau and/or the relevant authority in relation to positions that require trust and honesty and/or entail the handling of cash or finances and may also verify the applicant's educational qualifications and employment history. You voluntarily give the NMISA consent to process your personal information.