

ADVERTISEMENT

Scientist: Force, Torque and Hardness

Salary Range R 470 429.91 - R 553 446.95 (All inclusive)

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 Force, Torque and Hardness and disseminate traceability from these standards to industry, thereby supporting South African trade.

MINIMUM REQUIREMENTS, SKILLS AND EXPERIENCE

- B. Eng (Mechatronics or Electronic) or B. Tech (Electronic or Electro-Mechanical) with a clear understanding of mechanical systems)
- Research and development experience
- Technical report writing skills
- Working Knowledge of hydraulics systems and electronics
- Maintenance of measurement standards and related systems in an appropriate technical field
- Software development skills and knowledge
- Ability to network on a national and international level
- Working knowledge of ISO/IEC 17025 and NMISA Total Quality Management System
- Statistics, understanding the GUM and estimation of uncertainty of measurement

Duties and Responsibilities:

- Maintenance of traceability to support the purpose of the role
- Research and development of existing and new calibration techniques
- Development measurement standards and procedures and keep up to date with international developments in force, torque and hardness to ensure the laboratory's on-going relevance
- Participate in comparisons to facilitate the demonstration of international equivalence of measurements.
- Provide technical guidance and consultancy to customers, where necessary, thereby contributing to knowledge transfer to industry
- Calibrate measuring equipment, relevant to areas of responsibility, for NMISA thereby contributing to the NMISA overall ability to continue to support South African trade in all fields.
- Calibrate measuring equipment relevant to areas of responsibility, for external customers to disseminate traceability to industry
- Participate in selected NMISA wide technical forums thereby contributing to communication across all of NMISA
- Provide technical and scientific support to NMISA Management
- Assist with the development of new and review of existing uncertainty budget force, torque and hardness to ensure their continued correctness and effectiveness
- Ensure all scientific reporting is accurate to facilitate correct and complete records

- Checking and signing of certificates of calibration to verify their correctness thereby ensuring accurate dissemination of traceability
- Provide input and maintain laboratory plans for budget, capital and 3 year plan, as relevant to the areas of responsibility to contribute to the effective running of the lab thus ensuring its long term relevance.
- Comply with the requirements of the NMISA TQMS to ensure process consistency and effectiveness.

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. The ideal person should have analytical problem-solving abilities. He/she would be a dynamic self-starter not requiring much supervision. Communication skills, good writing skills and fluency in English are important, as he/she would need to interact and communicate with clients and technical staff on a daily basis. The ability to work both as part of a team and independently are essential.

Please note:

The NMISA subscribes to and applies the principles prescribed by the Employment Equity Act. Preference will be given to candidates who meet the requirements and who will add to the cultural and gender diversity of the organisation.

Interested and suitably qualified persons may forward all supporting documentation required (updated CV, certified educational qualifications and certified ID.) when applying for the position email NMISA Human Resource at careers@nmisa.org Only candidates with all supporting documents will be considered for the position. Clearly indicate which position you are applying for.

Closing date for applications: **31 March 2025**

People with disabilities are encouraged to apply.

Correspondence will be limited to short-listed candidates only. National Metrology Institute of South Africa 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 the position that require trust and honesty and/or entails the handling of cash or finances and may also verify the applicant's educational qualifications and employment history. You voluntarily give NMISA consent to process your personal information, and all the applications will be processed in accordance with the Protection of Personal Information Act 4 of 2013 (POPIA).