

## CAREER OPPORTUNITY

The Council for Scientific and Industrial Research (CSIR) is a leading scientific and technology research organisation, implementing projects throughout Africa and making a difference in people's lives.

### Electronic Engineer

#### About the job:

The CSIR has a vacancy for an **Electronic Engineer** in the Landward Sciences competency area within the Defence, Peace, Safety and Security (DPSS) unit. The incumbent will support the competency area with the design and implementation of tests, measurements and evaluation capabilities during the shot event activities such as explosives testing. It includes managing test, measurement and evaluation (TME) SET capacity and capability to ensure that appropriate test methodologies are followed and accurate data is captured. This opportunity is based in Pretoria.

#### Key responsibilities

- Provide specialist technical guidance to all team members with regard to test procedures, test equipment, conceptual design of experiments as well as design and development of specialised electronic devices;
- Provide mentorship to personnel involved in TME functions;
- Ensure the safe and effective operation of current (and future) equipment by authorised and trained personnel;
- Train new personnel in the maintenance and operation of specialised equipment;
- Apply diagnostic skills to troubleshoot and repair malfunctioning equipment;
- Design and manufacture specialised devices not readily available commercially for TME operations;
- Interpret and innovate to address requirements/inputs from researchers or applicators to conceptually design new instrumentation;
- Manufacture and test specialised devices for inclusion in research methodologies;
- Participate in the development and declaration of technology demonstrators the writing of papers and moderation of reports;
- Corporate governance in terms of financial, labour, procurement and environmental laws, regulations and policies (EHS, OHS, Security) Intellectual Property creation, management and transfer in accordance with contracts, regulations and policies.

#### Qualifications, skills and experience

- A Bachelor of Engineering (Honours) in Electronics with at least five years experience in analogue electronics including analogue components, their design and integration into bespoke testing electronics and the simulation.
- A Masters degree in electronics engineering will be added advantage;
- Experience in building of high speed low noise differential instrumentation amplifiers is essential;

- Demonstration of knowledge of environmental sensors (pressure, light, temperature, etc.) and signal conditioning thereof;
- Solid knowledge in peripheral interfacing to microprocessors/ microcontrollers/ PC /laptop and data acquisition systems (DAQ);
- Solid knowledge of signal processing techniques such as averaging, integration, FFT, filtering, etc;
- Proficiency in the setup, usage and post-processing of specialised electronic test instrumentation such as oscilloscopes, high speed DAQs, medium to high-speed cameras;etc.
- Proficient in fault finding and problem solving in high level electronics.

Should you meet the above requirements, please email your CV to [jobapplications@csir.co.za](mailto:jobapplications@csir.co.za) with your name and surname, position title and reference number in the subject line, **(e.g. John Smith: Electronic Engineer: Ref No: 307857)**

**Closing date: 15 March 2017**

**PLEASE NOTE THAT FEEDBACK WILL BE GIVEN TO SHORTLISTED CANDIDATES ONLY.**

For more info, please contact the CSIR Recruitment Centre on **012 841 4774** or email us at [Recruitmentinfo@csir.co.za](mailto:Recruitmentinfo@csir.co.za)

*The CSIR is an equal opportunity employer. As such, it is committed to the Employment Equity Act of 1998. By applying for this position at the CSIR, the applicant understands, consents and agrees that the CSIR may solicit a credit and criminal report from a registered credit bureau and/or SAPS (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. **The CSIR reserves the right to remove the advertisement at any time before the stated closing date and it further reserves the right not to appoint if a suitable candidate is not identified.***