

#### CAREER OPPORTUNITY

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

# **Environmental Instrument Technician/Researcher**

## About the Job:

CSIR Natural Resources and the Environment (NRE) unit conducts world-class, directed inter-disciplinary research and fosters technological innovation, with partners and stakeholders, in the field of natural resources and the environment, to contribute to the social, economic and environmental improvement of South Africa and Africa.

The Global Change and Ecosystem Dynamics Group in NRE has several field experiments where measurements of environmental variables such as rainfall, air temperature, humidity, solar radiation, soil moisture, atmospheric gas concentrations and wind velocities are made using sophisticated equipment. The instrumentation requires careful installation, calibration, data recovery and maintenance, and this necessitates regular visits to the remote sites to carry out these tasks. The data then needs to be cleaned and processed to provide the final values which are used to establish a better understanding of how South African ecosystems function. The sites also contain physical infrastructure such as towers, solar power systems, communications equipment, fences and experimental treatments which need to be installed, maintained and finally dismantled.

Our group is seeking an innovative, enthusiastic, self-sufficient and capable **Environmental Instrument Technician/Researcher** to assist in maintaining and monitoring our various experiments and instruments, largely in Limpopo and Mpumalanga, but potentially in other parts of South Africa as well. The candidate will also need to be able to process the complex numerical datasets to the level that they can be shared with other researchers: in other words, converted to standard format, checked for errors, adequately documented and archived, and with the routine calculations performed. The candidate will be expected to undertake further statistical analysis and exploration of the data, alone or in collaboration with colleagues, leading to the publication of research papers.

The position is based at the Pretoria offices of the Global Change and Ecosystem Dynamics Research Group at the CSIR.

# **Key responsibilities:**

- The candidate will be responsible and be able to work unassisted, and needs to show a high level of practical problem-solving skills, particularly with respect to diagnosing and fixing instrument and electrical faults in the field.
- The candidate must have an interest in ecosystem processes, and especially carbon and energy fluxes, with the goal of developing a career in this direction.

## Qualifications, skills and knowledge:

- The ideal candidate would have at least a 4-year post-matric Technical qualification if following the technician career path, or a Masters or Doctoral degree in a science or engineering field if following the researcher path, and at least three years of experience in the installation and operation of environmental monitoring equipment, preferably including eddy covariance measurements, and have demonstrated capacity to calibrate and problem-solve on advanced instrumentation, and analyse and report on data.
- The candidate must have a driver's licence and be prepared to undertake longdistance field trips on a regular basis, amounting to about 5 days a month, and should be prepared to work at heights, and in remote areas which may have wild animals.

Should you meet the above requirements, please go to the URL indicated below in order to apply; select the position reference number 302951; complete the application form and attach your CV: www.csir.co.za/apply.php

#### Closing date: 31 July 2013

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

Should you experience any problems in submitting your application, please contact the CSIR Recruitment Centre at <u>Recruitmentqueries@csir.co.za</u>. Please <u>do not</u> submit your application to this mailbox.

The CSIR gives preference to candidates who meet the job requirements and who will add to the cultural and gender diversity of the organisation. 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 not to appoint if a suitable candidate is not identified.