

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.

Engineer/Researcher: Renewable Energy Technologies

About the job:

The CSIR Energy Centre has a vacancy for an **Engineer/Researcher: Renewable Energy Technologies**. The incumbent will provide technical/engineering support to grow the CSIR Energy Centre's knowledge base with respect to resource assessment and forecasting, technologies and energy system impact and integration in order to provide support for the South African renewable energy industry. This position is based in Pretoria.

About the Centre:

The CSIR intends to establish an integrated energy research centre, where it will leverage the immense knowledge and skills base in energy that already exists within the organisation, and will reach out to external partners. The CSIR's integrated energy research agenda will focus on energy efficiency and renewable energies as two global megatrends. These two topics will be flanked with research on "enablers" for them, such as natural gas, smarter grids, energy storage, and mobility. System integration will play an important role in bringing the different facets of these topics together and make them work in an integrated energy system. CSIR is committed to provide decision-making support to South African businesses and policymakers that will be informed by its technical and technology research.

Key responsibilities:

- Provide input to projects, research and investigations on resource assessment/mapping, microscale modelling, forecasting, and State-of-Research Market Intelligence;
- Analyse resource data by using the appropriate measurements instruments and analysis tools;
- Provide technical/engineering support/input for renewable energy technologies in order to improve efficiency/performance and reduce costs;
- Contribute towards the development of new technologies, systems and methodologies;
- Contribute in the development of the centre by identifying/initiating potential projects and execute approved projects;
- Provide support in producing project proposals;
- Present and write reports to interested parties on, amongst others:
 - Emerging technologies, systems, processes and methodologies in the renewable energy domain
 - performance of the renewable energy plant
- Establish and grow effective relationships with specific clients;

- Coordinate with clients and subject matter experts in various disciplines and transferring knowledge to engineers and scientists;
- Mentor and coach junior Researchers in the renewable energy technologies field.

Qualifications, skills and experience:

- A Bachelor of Engineering or Science in mechanical or electrical engineering or equivalent with at least three years' experience in the renewable energy sector;
- Experience in conducting studies related to wind/solar resource assessment/mapping, modelling, wind/solar farm layout, and forecasting;
- Ability to use MATLAB (MATrix LABoratory);
- Ability to interpret resource data from e.g. meteorological data obtained using different sources;
- Ability to work as part of a team, influencing decisions and reacting positively to challenges;
- An understanding of the cost structure of renewable energy generation technologies and possible areas for improvement, i.e. increased efficiency and reduced cost;
- Understand the components of, and factors influencing Levelised cost of Electricity (LCOE);
- An understanding of relevant resource analysis tools commonly used within renewable energy industry;
- An understanding of relevant resource analysis tools commonly used within renewable energy industry;
- Aptitude in statistical analysis of data, preferably with experience manipulating large data sets;
- An understanding of the systems engineering approach.

Should you meet the above requirements, please email your CV to jobapplications@Csir.co.za with your name and surname, position title and reference number on the subject line, (e.g. **John Smith: Engineer/Researcher: Renewable Energy Technologies: Reference number : 307032**)

Closing date: 31 March 2017

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

For more info, please contact CSIR Recruitment Centre on **012 841 4774** or email us at Recruitmentinfo@csir.co.za

*The CSIR is an equal opportunity employer; as such 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.***