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.

Doctoral Studentships: Bio-Optics & Remote Sensing of Phytoplankton (Two opportunities)

About the job:

The CSIR has two opportunities for **Doctoral Studentships** in the Earth Observation and Systems competency area within the Natural Resources and the Environmental (NRE) Unit. The incumbent will undertake research duties on either one of the below topics.. This opportunity is based in Rosebank, Cape Town.

For more information about the competence area, please visit:
http://www.csir.co.za/nre/ecosystems/bes.html

Research topics:

- Development of existing phytoplankton particle population and optical property models, with applications primarily in the use of autonomous optical instruments to examine phytoplankton population dynamics in South African shelf seas and the Southern Ocean.
- The use of similar phytoplankton optical models for application as satellite ocean colour algorithms for the Southern Ocean and Benguela ecosystems, including event scale and decadal ecological analyses

Key Responsibilities:

- Prepare a research proposal to be approved by both the CSIR and the university;
- Prepare a written literature overview around the research topic;
- Perform original research to solve the problem that the student identified in his/her proposal;
- Produce sufficient quantity and quality of peer-reviewed publications around this research topic;
- Compile the Doctoral thesis and defending the work successfully;

Qualifications, skills, and experience:

- A Master's degree in numerical sciences (e.g. physics, mathematics, engineering, computational field); ;
- Basic understanding and use of basic statistics for statistical processing of large datasets.
- Knowledge/familiarity with performing data processing and interpretation of results on empirically gathered data
- Communication skills (oral, written and presentation)
- Willing and able to work for extended periods on research vessels at sea (Antarctica, local and international waters)

- Adequate skills and experience in computer coding;
- Experience in optics or remote sensing an advantage;
- Ability to work independently, as well as in a team;
- Self-starter and able to work under pressure.
- Self-motivated and ability to be stimulated by the scientific environment.

Applications must be accompanied by the following documents:

- Certified copies of academic results (including the latest academic results or transcript);
- Certified copies of tertiary qualifications and ID;
- CV;
- If applicable, proof of registration from university or confirmation letter from university supervisor that he/she is willing to be involved in the candidate supervision.

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 in the subject line, **(e.g. John Smith: Doctoral Studentship – Bio-Optics & Remote Sensing of Phytoplankton: Reference No: 307247)**

Closing date: 16 October 2016

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

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.***