

POST DOCTORAL RESEARCH FELLOWSHIP POSITION

WALTER SISULU UNIVERSITY
DEPARTMENT OF APPLIED SCIENCE
FACULTY OF SCIENCE, ENGINEERING AND TECHNOLOGY
BUFFALO CITY CAMPUS

A VACANT POST DOCTORAL RESEARCH FELLOWSHIP POSITION IS AVAILABLE IN THE DEPARTMENT OF APPLIED SCIENCE-POTSDAM SITE.

POSITION REQUIREMENTS:

Applicants must have a PhD in Inorganic Chemistry, be ambitious and be driven by scientific curiosity. Existing skills with regard to application of semiconductor photo-catalysts in water treatment are desired. Experience in the preparation of photo-catalytic ceramic membranes would be an advantage. The postdoctoral research fellow will have the opportunity to carry out R&D on development of various photo-catalyst for waste water treatment. Interested candidates should have a good track record in inorganic synthesis of magnetic photo catalyst, along with a desire to study structure-property relationships in nanocomposite materials.

POSITION OVERVIEW

This position is part of an existing collaborative research program to develop novel photo-catalytic ceramic membranes to manage and treat wastewater generated by industries such as the textile, pharmaceutical and pulp and paper. The individual filling this position will develop and carry out research related to this topic, and support the further growth of this research program through student mentoring, research proposal development and submission and publication of results.

JOB DESCRIPTION

- 50%-Perform research for the purpose of enhancing and developing research competencies in management, treatment and recovery of waste water. Participate in planning, designing and conducting highly technical and complex research projects under the direction of a supervisor. May or may not work independently.
- 25%-Contribute to the development of research documentation for publication and/or prepare technical reports, papers and/or records.
- 10%-Contribute to the development, preparation and submission of externally funded proposals related to the research program.
- 15%-Search literature, utilizing all available resources, including electronic, regarding new methodologies for development of magnetic and non-magnetic photo catalysts for water recovery, and design experiments accordingly.

MINIMUM REQUIREMENTS:

1. A recent **PHD** in Chemistry or closely related field NOT
2. A good track record of publications in *DHET* accredited journals (at least 8 journals)
3. Good track record on successful supervision of postgraduate students at the following levels at **DTech, PhD, MTech, MSc** and **BTech**.

PREFERRED QUALIFICATIONS

1. PhD in Chemistry
2. Academic or industrial laboratory hands on experience in one or more of the following areas:
 - 2.1. Treatment or modelling of waters/wastewaters contaminated with organics, microbes and heavy metals;
 - 2.2. Photo-catalytic applications in water treatment
 - 2.3. Membrane treatment processes for water/wastewater treatment.
3. Demonstrated ability to work successfully as part of a collaborative research effort
4. Experience in lab management
5. Excellent organizational skills
6. Effective verbal and written communication and interpersonal skill

Please Note -A PDRF is not an employee of the University and the position doesn't include any benefits other than the all-inclusive non-taxable fellowship.

-This is a performance based position and is renewable on successfully achievement of the milestones set by the host.

All prospective candidates should respond before 30th of September 2019 with an updated CV to Dr. R. Taziwa via email: rtaziwa@wsu.ac.za . The CV should have all the traceable details of the relevant journal publications, qualifications, contact details etc. It is preferred that all prospective candidates prepare a short research proposal (not more than 10 pages) on a topic of interest within this and attach it along with the CV for positive consideration. If you didn't get a response within two weeks of the closing date of application, kindly assume that your application was unsuccessful.

DEPARMENT OF APPLIED SCIENCES

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