# SCHOOL OF CHEMISTRY & PHYSICS, COLLEGE OF AGRICULTURE, ENGINEERING AND SCIENCE, UNIVERSITY OF KWAZULU-NATAL

## ADVERTISEMENT

### POSTDOCTORAL RESEARCH FELLOWSHIP: INORGANIC NANOMATERIALS CHEMISTRY

The Inorganic Nanomaterials Chemistry and Nanotechnology (INCN) research group in the School of Chemistry and Physics at UKZN invites applicants for a Postdoctoral Researcher Position. The INCN Lab is focussed on nanomaterials for catalysis, environmental remediation, development of novel therapeutic agents and next generation solar cells. We are looking for a postdoctoral scholar to lead and perform experiments in nanomaterials synthesis, morphological studies and photocatalysis. In addition, the scholar will prepare manuscripts for scientific journals, mentor postgraduate students in nanomaterials synthesis and photocatalysis.

The candidate must hold a PhD in Inorganic Materials Chemistry within the last three years. Applicants will have strong backgrounds and experience in nanomaterials synthesis, characterization and photocatalysis. In addition, applicants will display excellent interpersonal and writing skills. The initial appointment is for 12 months with a possibility of renewal for a second year subject to satisfactory performance.

### **KEY PERFORMANCE AREAS:**

- 1. Design, syntheses, and structural studies of single source precursors.
- 2. Thermolysis of single source precursors.
- 3. Electron microscopy and powder X-ray diffraction analyses of nanomaterials.
- 4. Photocatalytic and electrochemical studies on nanomaterials.
- 5. Preparation and publication of manuscripts in peer-reviewed international journals.
- 6. Mentorship and co-supervision of postgraduate students.

#### MINIMUM REQUREMENTS:

- 1. A recently earned PhD (not more than 3 years) in Inorganic Materials Chemistry.
- 2. Experience in synthesis, morphological and structural studies of nanomaterials.
- 3. At least six articles in the focus area in international peer reviewed and ISI journals.
- 4. Experience in photocatalysis.
- 5. Experience in electrochemical studies of nanomaterials
- 6. Experience in postgraduate student mentorship.

### VALUE AND DURATION OF THE FELLOWSHIP:

The value of the fellowship will be determined by the experience of the successful candidate. The fellowship is awarded for a period of one year and may be renewed for a further one year, subject to satisfactory performance and availability of funds.

#### HOW TO APPLY:

Interested and eligible candidates to send their applications to Mrs Kerry-Ann Jordan <u>JordaanK@ukzn.ac.za</u> by no later than **15<sup>th</sup> October 2021**. The application should include the following: (a) a cover letter detailing how the candidate meets the minimum requirements (b) One page statement of research (a) *Curriculum Vitae* including a list of research publications and other scholarlyoutputs; (c) copies of degree certificates and (d) names of three contactable referees. All enquiries regarding the post to be addressed to Prof Peter Ajibade, <u>ajibadep@ukzn.ac.za</u>; Tel 033 360 5658. The school reserves the right not make any appointment should a suitable candidate not be found.