UNIVERSITY OF SOUTH AFRICA

UNISA is the only publicly funded Institution in South Africa dedicated to distance education. In keeping with its mandate as a comprehensive, open and distance learning tertiary institution offering a variety of academic and career-focused programmes, the University is inviting applications for positions in the **COLLEGE OF SCIENCE ENGINEERING AND TECHNOLOGY.**

To be considered for a position, applicants must meet all the generic requirements plus the specific requirements as stated per position. If found suitable for appointment, Unisa may offer an applicant a position at a level other than the level that was applied for. Furthermore, Unisa reserves the right to offer the applicant a contract appointment.

ACTIVITY:

TEACHING STATEMENT:

All applicants to attach a teaching statement (max 2 000 words) to their application as specified in one of the following options:

Option A: External applicants and internal applicants (from non-academic positions) – Describe how you intend to approach teaching and learning by taking into account the information in the policies listed below:

- Unisa's Tuition Policy
- Unisa's Open Distance Learning Policy
- Unisa's Assessment Policy
- Curriculum Policy
- Open Distance Learning (ODL) Pedagogy

The above mentioned Policies of UNISA can be accessed on the web using a search engine. In the event that you cannot trace the ODL Pedagogy policy finalise your teaching statement without it.

Option B: Internal applicants (from academic positions) –
Explain your:

- Involvement in, or approach to, Open Distance Learning
- Approach to fostering a learner-centered approach
- Involvement in, or approach to, teaching at either undergraduate or postgraduate level
- Involvement in developing study material as an individual or in a team approach
- The extent to which you have, or would, use an electronic learning platform for teaching
- Your pass success rates in the courses you teach/taught and your plan to increase or maintain these rates
- A peer and student evaluation of your teaching
- Your involvement in and provision of learner support to students

ACTIVITY:

The teaching statement must be supported by a portfolio of evidence which may be requested from short listed candidates at the interview.
Candidates are expected to submit a research reflection or portfolio

ACTIVITY:

APPLICATION FORM FOR A PERMANENT ACADEMIC POST

ACTIVITY:

FOR MORE INFORMATION ON ACADEMIC POSITIONS (LEVELS) OPEN THE LINK OF THE POSITION YOU WHISH TO APPLY FOR:

POSITION: PROFESSOR

POSITION: ASSOCIATE PROFESSOR

POSITION: SENIOR LECTURER

☞ **The following positions exist in the various departments:**

COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
SCHOOL OF SCIENCE
DEPARTMENT OF MATHEMATICAL SCIENCES
FLORIDA-SCIENCE CAMPUS (FLORIDA)
FULL PROFESSOR/ ASSOCIATE PROFESSOR IN ASTRONOMY X1

(ACADEMICS) CANDIDATES WITH A RESEARCH OR ACADEMIC BACKGROUND
(NON-ACADEMICS) CANDIDATES FROM INDUSTRY

Full Professor/ Associate Professor ×1: Astronomy *(Ref. CSET/JM/Maths/A/10-2021)*

Post specific requirements for Professor:

- A Doctorate degree or equivalent in Astronomy/Astrophysics
- Proven research profile and consistent publication record in accredited journals, peer-reviewed conference proceedings, books or book chapters in line with the Unisa Research and Innovation Policy at this level.
- A proven record of supervision of research Masters and Doctoral students to completion.

Post specific requirements for Associate Professor:

- A Doctorate degree or equivalent in Astronomy/Astrophysics
- Proven research profile and consistent publication record in accredited journals, peer-reviewed conference proceedings, books or book chapters in line with the Unisa Research and Innovation Policy at this level.
- A proven record of supervision of research Masters students to completion.

Field of Expertise for this position

The candidate will need to be able to lead curriculum development of both new and existing modules. A passion for teaching and research in Astronomy is highly sought after.

Experience in using optical telescopes will be a useful skill that will be utilised in the Unisa Observatory and in spearheading astronomy outreach events using our portable GOTO telescopes. The candidate should have an interest, and preferably experience, in using South African astronomical research facilities such as SALT, other optical/IR telescopes in Sutherland, MeerKAT, HESS, HERA or HIRAX.

The candidate should have a track record of high-quality publications in Astronomy. Preference will be given to a radio astronomer and a candidate with research interests that align with the current research direction at Unisa.

Recommendations:

- Ability to lecture in an online environment
- An NRF rating or proof of application thereof would be an advantage

COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
SCHOOL OF SCIENCE
DEPARTMENT OF MATHEMATICAL SCIENCES
FLORIDA-SCIENCE CAMPUS (FLORIDA)
FULL PROFESSOR/ ASSOCIATE PROFESSOR IN FINANCIAL MATHEMATICS X1

(ACADEMICS) CANDIDATES WITH A RESEARCH OR ACADEMIC BACKGROUND
(NON-ACADEMICS) CANDIDATES FROM INDUSTRY

Full Professor/ Associate Professor ×1: Financial Mathematics (*Ref. CSET/JM/Maths/FM/20-2021)*

Post specific requirements for Professor:

- A Doctorate degree or equivalent in Financial Mathematics or related field
- Proven research profile and consistent publication record in accredited journals, peer-reviewed conference proceedings, books or book chapters in line with the Unisa Research and Innovation Policy at this level.
- A proven record of supervision of research Masters and Doctoral students to completion.

Post specific requirements for Associate Professor:

- A Doctorate degree or equivalent in Financial Mathematics or related field
- Proven research profile and consistent publication record in accredited journals, peer-reviewed conference proceedings, books or book chapters in line with the Unisa Research and Innovation Policy at this level.
- A proven record of supervision of research Masters students to completion.

Field of Expertise for this position

A PhD in Financial Mathematics or closely related fields (such as Stochastic calculus, Stochastic partial differential equations Financial Engineering, Actuarial Science, or Quantitative Risk Management).

The applicant will be expected to teach modules and supervise postgraduate students (MSc and PhD) in Financial Mathematics, in support of the Department's portfolio of transformation and postgraduate programmes in Financial Mathematics. Software Development Skills, i.e. Mathematical Programming in Python, Sage, Matlab, or C++ will be an added advantage.

Recommendations:

- Ability to lecture in an online environment
- An NRF rating or proof of application thereof would be an advantage

COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
INSTITUTE FOR NANOTECHNOLOGY AND WATER SUSTAINABILITY (iNanoWS)
PROFESSOR/ASSOCIATE PROFESSOR:
NANOSTRUCTURED MATERIALS X1

The Institute for Nanotechnology and Water Sustainability (iNanoWS) is a research Institute of the College of Science, Engineering and Technology (CSET) that innovatively addresses current and emerging issues relating to Water Quality and Water Scarcity. iNanoWS Focuses on the development of Nanotechnology enhanced smart materials and their application in Water Treatment and Water Sustainability. iNanoWS has two Research Focus areas namely Nanoscience/Nanotechnology and Water Sustainability. The Institute is further divided into the following thematic areas; Membrane Science and Technology, Nanostructured Materials, Applied Electrochemistry, the Urban Water Cycle and Water Treatment Technologies, Water and Health, and Analytical & Environmental Research.

Full Professor/ Associate Professor ×1: Nanostructured Materials (*Ref. CSET/JM/iNanoWs/30-2021)*

Post specific requirements for Professor

Qualifications

- Doctorate in Chemistry, Materials Science/Engineering, Nanoscience or equivalent

Requirements

- The candidate must have a proven track record in the field of photocatalytic materials, advanced oxidation processes, synthesis/characterization of nanostructured materials and other materials based on composite structurers with application in water treatment and in acid mine drainage remediation.
- 5 years teaching/work/relevant experience.
- Proven research profile and consistent publication record in peer-reviewed conference proceedings or journals in line with the Unisa Research and Innovation Policy at this level.
- A proven record of supervision of postgraduate (Masters and Doctoral) students to completion.
- Mentoring of junior staff and the ability to attract external funding in the relevant field of research and collaboration with other researchers, both nationally and internationally, as well as involvement in industry-based research
- A proven track record of successful mentoring of Postdoctoral Fellows.

Recommendations

- Registration with South African Professional bodies such as SACNASP and ECSA
- An NRF rating will be an added advantage

Post specific requirements for Associate Professor

Qualifications

- Doctorate in Chemistry, Materials Science/Engineering, Nanoscience or equivalent

Requirements

- The candidate must have a proven track record in the field of photocatalytic materials, advanced oxidation processes, synthesis/characterization of nanostructured materials and

other materials based on composite structurers with application in water treatment and in acid mine drainage remediation.

- 4 years relevant teaching/work/relevant experience.
- Proven research profile and consistent publication record in peer-reviewed conference proceedings or journals in line with the Unisa Research and Innovation Policy at this level.
- A proven record of supervision of postgraduate (Masters or Doctoral) students to completion.

Recommendations

- Registration with South African Professional bodies such as SACNASP and ECSA

Salary : Remuneration is commensurate with the seniority of the position

Assumption of duty : As soon as possible.

Enquiries : **011 670 9081 Mr J Maano**

Closing Date : **15 October 2021** *(Email application before close of business at 16:00).*

Your **APPLICATION FORM FOR A PERMANENT ACADEMIC POST** must be accompanied by a COMPREHENSIVE CURRICULUM VITAE and;

- identity document (*including passport, work permit, permanent residence permit or proof of nationalisationif applicable*) (certified copies within the previous six months);
- all educational qualifications (certified copies within the previous six months).
- academic transcripts/records (certified copies within the previous six months);
- proof of SAQA verification for foreign qualifications (*if applicable)* (certified copies within the previous sixmonths)
- **for ACADEMIC POSITIONS** a teaching statement (refer to page 1 of advertisement).

- UNISA reserves the right to authenticate all qualifications without any further consent from the applicant.
- The contact details of three contactable references must be provided, one of which must be from your presentemployer excluding your current line manager if you are an internal Unisa applicant
- **Late, incomplete and incorrect applications will not be considered**.
- Unisa is not obliged to fill an advertised position
- *Appointments will be made in accordance with Unisa's Employment Equity Plan and other applicablelegislation.*

- **We welcome applications from Persons with Disabilities**

ACTIVITY:

- **Applications must be emailed to** CSET2PA@unisa.ac.za
- **If you apply for more than one position, each application must be on a separate email.**
- **Applications emailed to the wrong email address will not be considered.**
- **Late, incomplete and incorrect applications will not be considered.**

All applications should reach UNISA before 16h00 on the closing date.

Correspondence will be limited to short-listed candidates only. If you have not been contacted within twomonths after closing date of this advertisement, please accept that your application was not successful.