

Postdoctoral Fellow Positions (x2) Available in Postharvest Technology

The South African Research Chair (SARChI) in Postharvest Technology (www.sun.ac.za/postharvest) focuses on cross-cutting innovative technologies for cool chain management, measurement and control of postharvest quality in the agricultural and horticultural industries. SARChI Postharvest Technology is seeking to appoint two recent PhD graduates (within last 5 years) in engineering, technology, science and related applied sciences as postdoctoral fellows in the following research areas:

Modelling the postharvest cold chain

The successful candidate will be expected to develop and participate in research looking at modelling airflow, heat and mass transfer in the cold chain such as refrigerated containers, packaging and cool stores. Requirements include ♦ PhD research using numerical modelling techniques such as computational fluid dynamics (CFD) and/or finite elements modelling ♦. Demonstrable ability to work with related software ♦ Proven ability to publish in high impact scientific journals in the field.

Non-destructive quality measurement and prediction

The successful candidate will be expected to develop and participate in research using non-destructive tools to measure, model and predict external and internal quality attributes of fresh and processed food products. Requirements include ♦ PhD research in non-destructive measurement ♦ Proven ability to publish in high impact scientific journals in the field ♦. Demonstrable ability to work with related equipment ♦ Experience with bio-statistical analysis and chemometrics, particularly in relation to product differentiation.

General duties and responsibilities To conduct original research, participate in supervision of postgraduate students, and prepare reports and scientific articles for publication.

Personal attributes Open-minded and willingness to push the boundaries of scientific enquiry. Passion for research and excellence.

Duration 1 year and renewable annually based on performance and availability of funds.

Preference will be given to South African applicants, especially women.

Closing date 31 December 2018 or as soon as suitable candidates are selected.

Application: Submit the following information to the host, Distinguished Professor Umezuruike Linus Opara (opara@sun.ac.za; cc: nazneen@sun.ac.za): (a) Letter of motivation, (b) Detailed CV, highlighting qualifications, research experience and expertise, scientific papers, and (C) Contact details of at least 2 referees. Applicants should request their referees to forward confidential reports by the closing date direct to the same address.