

**Postgraduate Bursaries/Scholarships**

**Available in Postharvest Technology**

The South African Research Chair (SARChI) in Postharvest Technology ([www.sun.ac.za/postharvest](http://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 award the following grantholder-linked postgraduate bursaries in 2019 for full-time study at Stellenbosch University:

**Number of bursaries available**

♦ Doctoral x2 ♦MSc/MEng x2 ♦Honours x2

**Value**

♦Doctoral R 100 000 ♦Masters R 70 000 ♦Honours R 40 000

**Research Themes**

*Modelling postharvest handling systems*

The successful candidates will participate in research on modelling airflow, heat and mass transfer in the cold chain such as refrigerated containers, packaging and cool stores. Candidates will be expected to develop and apply their skills in numerical modelling techniques such as computational fluid dynamics (CFD) and finite elements modelling to the design and performance evaluation of cold chain systems such as ventilated packaging, refrigerated containers and stores.

*Non-destructive quality measurement and prediction*

The successful candidates will participate in research using non-destructive and non-invasive tools such as near-infrared spectroscopy and x-ray micro–computed tomography (micro-CT) to measure, image, model and predict external and internal quality attributes of fresh and processed food products.

***Criteria***

Excellent academic records. Qualification in engineering, technology, science and related applied sciences. For doctoral candidates, record of publications from previous research will be advantageous. Open-minded, ability to work in a multi-disciplinary and diverse research environment, and willingness to push the boundaries of scientific enquiry. Passion for research and excellence.

***Duration*** Doctoral 3 years, MSc/MEng 2 years and Honours 1 year.

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

***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 and publications (where applicable), (c) Academic certificates and transcripts.

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