

FACULTY OF SCIENCE, ENGINEERING & TECHNOLOGY

Doctor of Science Honoris Causa

Walter Sisulu University is honoured to confer the degree of Doctor of Science Honoris Causa upon Professor Tebello Nyokong at the graduation ceremony of 3 May 2010.

The early years of Tebello Nyokong's childhood were spent in Sharpeville followed by a move to the Free State to live with her farm worker paternal grandmother, and finally to Lesotho where she lived with her maternal grandparents. Her parents moved to Lesotho after the Sharpeville massacre and she grew up partly as a shepherd, going to school on alternate days during her early primary school years in Lesotho.

She obtained her first degree in Chemistry and Biology, with a concurrent certificate in Education, at the University of Lesotho in 1977. She did her MSc and PhD studies in Chemistry in Canada. She graduated with PhD in Chemistry in 1987 from the University of Western Ontario, Canada. She was married to Kelebone Nyokong, who has passed on, and her two children were born while she was studying in 1974 and 1977.

Following completion of her PhD degree, Tebello Nyokong returned to the University of Lesotho in 1987 as a lecturer and then senior lecturer in Chemistry. In 1990, she was awarded a Fulbright fellowship and spent a year at the University of Notre Dame in the USA. She moved to Rhodes University in 1992 as a lecturer where she became full professor in 2001.

Professor Nyokong is currently DST/NRF Professor of Medicinal Chemistry and Nanotechnology and is researching cancer diagnosis and treatment which is an alternative to chemotherapy, using a red laser light and the same dyes used in blue denims, which are harmless by themselves but are activated on exposure to light to destroy cancerous tissue.

Professor Nyokong is also the Director of the DS TJMintek Nanotechnology Innovation Centre that researches the development of Sensors, and adjunct professor of chemistry at the University of Tromso in Norway. Her research is multi-institutional and multi-disciplinary. She collaborates with physicists; Professor Chen, (China) and Professor Derck Schlettwein (Germany), biochemist; Professor Norbert Lange (Switzerland), electrochemists; Dr F Bedioui (France) Dr P. Westbroek (Belgium) and Professor Zagal (Chile), synthetic chemists; Professor Cook (UK), Prof Kobayashi (Japan) and with theoreticians; Prof Stillman, (Canada University).

She has extensive experience of PhD and MSc supervision, with 35 PhD and MSc students of which these are mainly PhDs, having completed their degrees under her supervision. She aims at producing high quality graduates who will also become professors at Universities in their own right. Most of her students are female. In particular, she attracts female students in their third year and nurtures them so that they can have a wider vision and study further. The aim is to create female role models for the future. As part of their training, her students spend 2 to 6 months in overseas laboratories including Japan, Belgium, Canada, France, Germany, Switzerland and the United Kingdom with her collaborators.

She has published over 280 papers in international journals, including book chapters. She was recognized by the National Research Foundation as one of the top three publishing scientists in South Africa in 2007. She is also an editor or on the editorial board of three international journals. She and her students have presented their work in over 300 conferences internationally.

She has received numerous awards for her research including:

NRF President's award as Champion for the transformation in research - 2009.

L'Oreal-UNESCO award for "Women in Science" as a Laureate representing Africa and the Arab States in 2009. Committee chaired by Prof A Zewail, recipient of Nobel prize in Chemistry, 1999.

Awarded 2009/2010 CEO (Celebrating excellence in organizations) Most Influential Women (MIW) in Business and Government - Education and Teaching Sector.

Awarded City Press and Rapport Prestige Award for Inspirational Women Achievers - 2008.

Bestowed with the Order of Mapungubwe (bronze) by the former State President Mbeki for her contribution to Science in 2005. This is the highest national award given to a South African citizen from the Republic of South Africa.

Winner of SABC2/Shoprite - Checkers Woman of the year in Science and Technology in 2004, Rhodes University's Vice Chancellor's Distinguished Research award, 2003.

In addition to these awards, in September, 2009, a motion was passed in the National Assembly acknowledging her role in transformation of science in South Africa. Subsequently she addressed the Parliament Portfolio Committee on Science. She is also involved in promoting science to high school learners in order to make sure we have the skills for the future. Apart from her research and promotion of students Nyokong has over the years also been involved in promoting research to women academics. For example, she organized symposia aimed at linking women researchers in Southern Africa. She has been involved in the African Academy of Sciences project on the promotion of Science to Girls and Women from 1994. She was involved in South African reference group for women in Science and Technology, a group under the Department of Science and Technology in 2003 for developing policy regarding women in science.

She is on the board of the National Research Foundation, the Vice-Chairperson of the steering committee of Scifest Africa. She has also been appointed by the Minister of Science and Technology to be a member of the panel to select members of council for the South African Council for Natural Scientific Professions, among many of her committee involvements.