

# RHODES UNIVERSITY, GRAHAMSTOWN, SOUTH AFRICA

## STAFF INFORMATION



# PROF TEBELLO NYOKONG (OMB, FRSSA, FRSC)

Distinguished Professor Rhodes University

DST/NRF Research Professor of Medicinal Chemistry Nanotechnology

Director: DST/Mintek Nanotechnology Innovation Centre

# **CONTACT DETAILS:**

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## **EDUCATION DETAILS:**

PhD Chemistry, The University of Western Ontario, London, Ontario, Canada, 1987.

MSc Chemistry, McMaster University, Hamilton, Ontario, Canada, 1981.

BSc Chemistry and Biology, with Concurrent Certificate in Education, University of Lesotho, 1977.

MSc and PhD studies funded by the Canadian International Development Agency (CIDA). BSc funded by the Lesotho Government.

#### APPOINTMENTS AND EXPERIENCE:

- 1. Distinguished Professor of Chemistry
- 2. Director of the DST/Mintek Nanotechnology Innovation Centre Sensors
- 3. Holder of Research Chair Medicinal Chemistry and Nanotechnology- awarded by DST/NRF
- 4. Adjunct professor of chemistry at University of Tromso in Norway- from 2008
- 5. Professor of Physical-Inorganic Chemistry, Rhodes University, 2001-2006
- 6. Associate Professor of Physical-Inorganic Chemistry, Rhodes University, 1998 -2000
- 7. Lecturer/Senior Lecturer in Chemistry, Rhodes University, 1992 1997.
- 8. Lecturer/Senior Lecturer in Physical-Inorganic Chemistry, University of Lesotho, 1981, 1987-1991.
- 9. Teaching Assistant, McMaster University, 1979-1980, and The University of Western Ontario, 1982-1986.

### **PUBLICATIONS:**

Over 640 Publications - Click on link below to see all Publications:

https://www.ru.ac.za/nanotechnology/researchoutputs/papers/

### **BOOKS AND BOOK CHAPTERS:**

Over 640 Publications - Click on link below to see all Publications:

https://www.ru.ac.za/nanotechnology/researchoutputs/books/

#### **RESEARCH PROJECTS:**

Click on link below for more details:

http://www.ru.ac.za/nanotechnology/research/

# **RECOGNITION AND AWARDS:**

- 1. Awarded Doctor of Science Honoris Causa by University of Kwazulu-Natal, 18th April 2018
- 2. November 2017 Council for Scientific and Industrial Research (CSIR) National Laser Centre Rental Pool Programme Award based on student training on lasers supplied through the programme:
- An award for the number of Doctoral students that graduated in 2016/2017 and
- Number of students trained in 2016/2017
- 3. November 2017 Black Science, Technology & Engineering Professionals (BSTEP) identified Prof

Nyokong as a legend and honoured her in its first ever Black Science, Engineering and Technology (SET) excellence award ceremony.

- 4. 2016 Council for Scientific and Industrial Research (CSIR) National Laser Centre Rental Pool Programme Award for most publications and most doctoral students trained in 2015.
- 5. Continental Award Kwame Nkrumah Scientific Award by the African Union in 2016
- 6. Recognized by CEO (Celebrating excellence in organizations) in Johannesburg as the most influential woman in Education & Training in South Africa and the SADC (Southern African Development Community) region. CEO is a network of leaders from the SADC" 2015
- 7. UNESCO Medal for Contribution to Development of Nanoscience and Nanotechnologies 2015
- 8. Appointed by United Nations Secretary-General Ban Ki-moon as part of United Nations Secretary-General's High-Level Panel on Technology Bank For Least Developed Countries 2015
- 9. Jury L'ORÉAL-UNESCO For Women in Science Awards 2014/2015
- 10. Featured in 21 Icons (SABC-3), South Africa 2014
- 11. National Research Foundation "Lifetime Achievement Award" 2013
- 12. National Research Foundation Rating: A
- 13. Awarded Third World Academy of Science (TWAS) Medal 2013
- 14. ISE Electrochemistry Excellence Award: Teaching & Research 2013
- 15. Elected fellow of the African Academy of Sciences 2013
- 16. South African Chemical Institute (SACI) Gold Medal award 2012
- 17. Included in the National Center for Research on Human Evolution (CENIEH), located in Burgos, Spain to be one of their "13 NAMES TO CHANGE THE WORLD" 2012
- 18. Named by IT News Africa as one of the top 10 most influential women in science and technology in Africa.
- 19. Awarded the Distinguished professorship at Rhodes University 2012
- 20. RSC (Royal Society in Chemistry)/ PACN (Pan African Chemistry Network) Distinguished Women in Chemistry: 2011
- 21. Invited by Irina Bokova, Director-General of UNESCO, to be a member of the UNESCO High-level panel on Science, Technology and Innovation for sustainable Development, June 2011
- 22. International Conference on Frontiers of Polymers and Advanced Materiel (ICFPAM) award in memory of the centenary of the first Nobel Prize in Chemistry awarded to a woman: Marie Curie. And also this is the year of Chemistry, 26th May 2011.
- 23. Inducted by Vodacom Lesotho into the Lesotho Hall of Fame, 2010
- 24. Awarded Doctor of Science Honoris Causa by Walter Sizulu University, 3rd May, 2010
- 25. Awarded Doctor of Science Honoris Causa by University of South Africa, 11th May, 2010
- 26. Elected Fellow of Third World Academy of Science -2009.
- 27. Awarded NRF President's award as Champion for the transformation in research 2009.
- 28. Awarded 2009/2010 CEO (Celebrating excellence in organizations) Most Influential Women in Business and Government (MIW) Education and Teaching Sector.
- 29. Received L'Oreal-UNESCO award for "Women in Science" as a Laureate representing Africa and the Arab States in 2009. Committee chaired by Prof A Zawail (Recipient of Nobel prize in Chemistry, 1999). Also in the committee C. de Duve, recipient of Nobel prize in Medicine, 1974).
- 30. 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.
- 31. Recognized as one of the top three publishing scientists in South Africa for 2007.
- 32. Awarded City Press / Rapport Prestige Awards for Inspirational Women Achievers 2008.
- 33. Awarded Research chair for Medicinal Chemistry and Nanotechnology by the Department of Science and Technology and the National Research Foundation, starting 2007.

- 34. Bestowed with the Order of Mapungubwe: Bronze by the State President Mbeki -2005.
- 35. Awarded a Grant-Holder medal for 2005 from CSIR for being the best NLC grant holder of the year 2005.
- 36. Chosen as Rhodes University Rhodes Women of the Year in the Senior Research category, 2006.
- 37. Winner of SABC2/Shorprite-Checkers Woman of the year 2004 in Science and Technology.
- 38. Runner-up- DST Women in Science, 2004 and 2008.
- 39. Selected by Department of Science and Technology to present the Frances Ames Lecture, 2004.
- 40. Vice-Chancellor's Distinguished Senior Research award 2003.
- 41. Elected Fellow of the Royal Society of South Africa (FRSSA).
- 42. Member of the Academy of Science of South Africa.
- 43. Fulbright Award, 1990. Visited the Radiation Laboratory, University of Notre Dame, Indiana, USA.
- 44. Financial Mail little black book list for two years (2006, 2007, 2008, 2009) for top 100 influential people in South Africa.

# MEMBERSHIP TO BOARDS/COUNCILS OF ORGANISATIONS:

- 1. Member of Council of Scientific and Industrial Research (CSIR) Strategic Review Committee 2012
- 2. Appointed to United Nations Educational, Scientific and Cultural Organization (UNESCO) Panel 2011
- 3. Jury Member for the L'Oreal/UNESCO Regional Fellowships for Women in Science in Sub-Saharan Africa -2011
- 4. Member of Board of Directors: Friends of Pwani University (FoPU) (Kenya) from 2011
- 5. National Research Foundation Board member (2005 2011).
- 6. Board of the "Women in Science and Technology in Africa Network", an organization which is sponsored by the Rockefeller Foundation and UNESCO -1995-2000. Still continue mentoring women even though the funding ended.
- 7. Board of the DST-NRF Centre of Excellence in Catalysis (appointed 2005, but resigned end of 2005 due to load).
- 8. A member of Council: University of Lesotho -2005 -2008.
- 9. Judge: Shoprite/Checkers-SABC-2 Woman of the year-Science and Technology 2006-2008.

### **EDITORSHIP/MEMBERSHIP TO EDITORIAL BOARDS:**

- 1. Editor: African Journal of Pure and Applied Chemistry.
- 2. South African Representative: Society of Porphyrins and Phthalocyanines based in France.
- 3. Global Journal of Physical Chemistry Editorial Board member
- 4. Journal of Spectroscopy& Dynamics Editorial Board member
- 5. International Journal of Electrochemical Science Editorial Board member
- 6. Advanced Materials Letters Editorial Board member
- 7. Guest editor: Special Issue for International Journal of Photoenergy (2011) Special Issue on Photomedicine and Photo Nanosystems
- 8. Guest Editor: International Journal of Electrochemistry: Special Issue "Surface Electrochemistry: Structured Electrode, Synthesis, and Characterization
- 9. Evaluation of French projects : Agence Nationale de la Recherche

- 10. Evaluation of Belgian projects : Research Foundation Flanders
- 11. Evaluation of Czech Republic research foundation projects

### **MENTORSHIP:**

Mentoring: Dr Ceril Jones, of Savannah State University,

Project Title: Thermodynamic Characterization of Phthalocyanines for Photodynamic Therapy.

National Institute of Health (NIH) funding.

### **ADVISORY ROLES:**

- 1. Invited to assist in the selection of the Associate Professor of Chemistry, University of Venda, Feb., 1997.
- 2. A member of the Water Research Commission Steering Committee reviewing the University of the Western Cape Project on Desalination and Disinfection of Water, 1998-2001
- 3. A member of the Foundation for Research Development (FRD) panel for monitoring FRD/Industry programs at Port Elizabeth Technikon, 1998.
- 4. A member of the advisory board: International Conference and exhibition on Integrated Environmental Management in South Africa, held Feb. 1998. This conference was a joint effort between Germany and South Africa.
- 5. A member of the Advisory Board: Southern and Eastern Africa Network of Analytical Chemists (SEANAC) conference. Gaborone, Botswana, 7 10 July, 2003 and 15-18th July, 2007.
- 6. A member of the South SOUTH AFRICAN REFERENCE GROUP ON WOMEN IN SCIENCE AND TECHNOLOGY, a group under the Department of Science and Technology –2003.
- 7. 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 (April, 2004).
- 8. A member of the advisory Board for the XVIII International Symposium on Bioelectrochemistry and Bioenergetics (19-24 June, 2005, Coimbra, Portugal.
- 9. A member of the advisory Board: The World Association of Laser Therapy 2008 Conference, 19 22 October 2008, Sun City, South Africa.
- 10. Invited to review candidates for 2010 Reaxys PhD Prize- Post-doctoral fellows from UK, Belgium, Spain. France and the UK.
- 11. Advisory board of South African Chemical Institute (SACI) 2011 CONVENTION, 16–21 January 2011, University of Witwatersrand, Johannesburg.

## **CURRENT STUDENTS/STAFF:**

http://www.ru.ac.za/nanotechnology/people/