

NRF AWARDS 2013



National
Research
Foundation

DATE: 27 August 2013

VENUE: Boardwalk Hotel, Port Elizabeth



Welcome

Dr Albert van Jaarsveld
Chief Executive Officer
27 August 2013

It is extremely appropriate that we are celebrating the 75th anniversary of the re-discovery of the Coelacanth in the Eastern Cape. Were it not for the concerted efforts of researchers, such as those present here today, we may never have re-discovered this living fossil with a history that spans a period of over 400 million years. That we can today contemplate and research its continued presence and conservation on this planet is astounding. May other species threatened by our very presence on this planet, such as the rhino, receive a similar reprieve.

Besides its biodiversity, South Africa maintains a rich heritage of research that has made important impacts worldwide. From our A- and P-rated researchers to the individuals chosen as recipients of our special recognition awards, have all played a key role in carrying our country forward in the global knowledge economy as well as ensuring their own place in archives of South Africa's research history. My personal congratulations to everyone receiving due acknowledgement this evening.

BACKGROUND

The NRF evaluation and rating system was created from the principle that the key element in contributing to quality research with international standing lay in the quality of the researchers. The evaluation and rating system was therefore designed to encourage researchers in South Africa to produce high quality and high impact research outputs. Based on peer review, the NRF's evaluation and rating system has, to date, seen the participation of more than 30 000 local and foreign researchers as reviewers.

The system initially provided for A, B and C rating categories, which were subsequently expanded to include sub-categories as well as a category for young researchers. From its initial inception until 2001 the evaluation and rating system applied only to researchers in the natural sciences, engineering and technology. In June 2001 the NRF Board approved the rating of all researchers, and an evaluation and rating system for researchers in the social sciences and humanities was introduced in 2002.

P-RATED RESEARCHERS

A "P" rating is assigned to researchers (normally under 35 years of age), who have held a doctorate or equivalent qualification for less than five years at the time of application. These researchers are considered likely to become future international leaders in their respective fields, on the basis of exceptional potential demonstrated in research performance and output during doctoral and/or early post-doctoral careers.



Professor Alex Broadbent
Department of Philosophy
University of Johannesburg



Dr Ake Fagereng
Department of Geological Sciences
University of Cape Town



Dr Andrew Hamilton
Department of Physics
University of Cape Town

A-RATED RESEARCHERS

Acquiring an NRF rating generates considerable acknowledgement and respect for the individual researchers as well as their institutions. A-rated researchers are unequivocally recognised by their peers as leading international scholars in their respective fields, for the high quality and impact of recent research outputs.



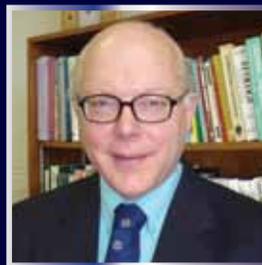
Professor Drucilla Cornell
Department of Political Sciences
University of Pretoria



Professor Don Cowan
Department of Genetics
University of Pretoria



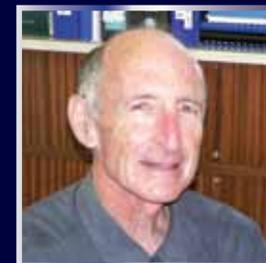
Professor Igor Barashenkov
Department of Mathematics and
Applied Mathematics
University of Cape Town



Professor Douglas Butterworth
Department of Mathematics and
Applied Mathematics
University of Cape Town



Professor John de Gruchy
Department of Religious Studies
University of Cape Town



Professor Peter Donald
Department of Paediatrics
and Child Health
Stellenbosch University



Professor Michael Chapman
Department of English
University of KwaZulu-Natal



Professor Darrell Comins
School of Physics and
Materials Physics Institute
University of the Witwatersrand



Professor Hendrik Ferreira
Department of Electrical and
Electronic Engineering Technology
University of Johannesburg



Professor Gerd Gäde
Department of Zoology
University of Cape Town



Professor Harold Kincaid
School of Economics
University of Cape Town



Professor Bert Klumperman
Department of Chemistry and
Polymer Science
Stellenbosch University



Professor Lionel Opie
Department of Medicine
University of Cape Town



Professor Marius Potgieter
Centre for Space Research
North-West University



Professor Fazal Mahomed
School of Computational and
Applied Mathematics
University of the Witwatersrand



Professor John Maina
Department of Zoology
University of Johannesburg



Professor David Richardson
Centre for Invasion Biology
Stellenbosch University



Professor Don Ross
School of Economics
University of Cape Town



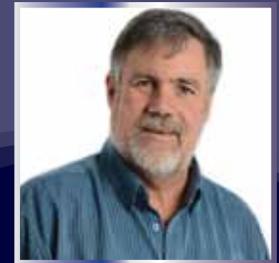
Professor Thaddeus Metz
Department of Philosophy
University of Johannesburg



Professor Tebello Nyokong
Department of Chemistry
Rhodes University



**Professor Philippe-Joseph
Salazar**
Centre for Rhetoric Studies
University of Cape Town



Professor Bob Scholes
Natural Resources and the Environment
Council for Scientific and Industrial
Research

SPECIAL AWARDS

CHAMPION OF RESEARCH CAPACITY DEVELOPMENT AT SOUTH AFRICAN HIGHER EDUCATION INSTITUTIONS

This award acknowledges an individual for his contributions to the transformation of South Africa's community and landscape. The aim of this award is to encourage and promote this activity across the South African research community.



Professor Clifford Shearing
Centre of Criminology
University of Cape Town



Professor Dan Stein
Department of Psychiatry
University of Cape Town



2013 RECIPIENT
Professor Neil Coville
School of Chemistry
University of the Witwatersrand

PREVIOUS RECIPIENTS

2012 – Professor Kelly Chibale
2011 – Professor Yusuf Waghid
2010 – Professor Alison Lewis
2009 – Professor Tebello Nyokong



Professor Andries van der Walt
Department of Public Law
Stellenbosch University



Professor Jack van Honk
Department of Psychiatry
University of Cape Town

TRANSFORMATION OF THE SCIENCE COHORT

This award recognises an individual for outstanding efforts to advance his career in science, and for achieving world-class research performance, despite considerable equity challenges.



Professor Heribert Weigert
Department of Physics
University of Cape Town



2013 RECIPIENT
Professor Maano Ramutsindela
Department of Environmental and
Geographical Science
University of Cape Town

PREVIOUS RECIPIENTS

2012 - Professor Anusuya Chinsamy-Turan
2011 - Professor Bongani Mayosi
2010 - Professor Shabir Madhi
2009 - Professor Thokozani Majazi
2008 - Professor Phuti Ngoepe
2007 - Professor Mokgethi Motlhabi

LIFETIME ACHIEVEMENT

This accolade is awarded to an individual considered to have made extraordinary contributions, of international standard and impact, to the development of science in and for South Africa over an extended period of time.



2013 RECIPIENT
Professor Tebello Nyokong –
*Department of Chemistry
Rhodes University*

PREVIOUS RECIPIENTS
2012 - Professor Timothy Noakes
2011 - Professor Malegapuru Makgoba
2010 - Professor Phillip Tobias
2009 - Professor Njabulo Ndebele
2008 - Professor Patricia Berjak
2007 - Dr Mamphela Ramphele
2006 - Dr Bob Brain
2005 - Professor Es’Kia Mphahlele
2004 - Dr Reinhard Arndt

Professor Tebello Nyokong is one of those rare individuals who has, in the course of her career, not only advanced the frontiers of scientific research but who has also served as a role model for women and previously disadvantaged individuals in science. Born in Maseru, Lesotho, Prof. Nyokong obtained her BSc in Chemistry and Biology as well as a concurrent Certificate in Education from the University of Lesotho in 1977. With funding from the Canadian International Development Agency, she was able to complete her Master’s degree at McMaster University and her PhD in Chemistry at the University of Western Ontario in Canada, where she also worked as a Teaching Assistant.

She is currently a Distinguished Professor of Chemistry at Rhodes University and holder of the DST-NRF Research Chair in Medicinal

Chemistry and Nanotechnology, as well as Director of the DST-Mintek Nanotechnology Innovation Centre focussing on sensors.

Through her international reputation, Prof. Nyokong has contributed hugely to enhancing the reputation of South African and African science. She has undertaken formal international collaborations with counterparts in a number of countries, and has been awarded a prestigious Adjunct Professorship by the University of Tromso in Norway. Many international scientists have been drawn to visit South Africa by her work and her laboratory at Rhodes University. Here she has hosted numerous post-doctoral candidates from around the world.

As a researcher, Prof. Nyokong has established a long and admirable track record. Her work has not only made

her one of South Africa’s household names in science and research, but has contributed significantly to areas of social and economic importance to South Africa and the world. She has been at the forefront in developments important for the effective treatment of cancer through her contributions in photodynamic therapy and has contributed to the fabrication of molecular sensors for various environmentally, biologically and medically important applications.

She has registered a patent and published/co-published eight books and book chapters. In addition, she has authored/co-authored more than 430 articles in refereed journals such as the *New Journal of Chemistry*, *Polyhedron*, and the *Journal of Physical Chemistry*. In 2007 she was recognised by the NRF as one of the top three publishing scientists in South Africa. She has also served as Editor of the *African Journal of Pure and Applied Chemistry* as well as on the Editorial Boards of the *International Journal of Electrochemical Science*, and *Scientific World Journal*.

While her research has garnered considerable recognition, she also invests a huge amount of time and energy into bringing previously disadvantaged students, particularly women, into the scientific mainstream. She is a supreme role model who has supervised a total of 73 Master’s, Doctoral and post-Doctoral students and is currently supervising another 25. An impressively high number of her MSc students under her supervision have achieved distinctions. She has also been extensively involved in assisting staff and students from less advantaged universities.

Her list of accolades is extensive and includes numerous awards such as the Fulbright Award, the SA Chemical Institute’s Gold Medal, the Royal Society in Chemistry and Pan African Chemistry Network Distinguished Women in Chemistry award, the L’Oreal-UNESCO Award for Women in Science representing Africa and the Arab States and, in 2005, was presented the Order of Mapungubwe: Bronze by then President Thabo Mbeki.

She was awarded the Third World Academy of Science medal for 2013 for outstanding contribution to Science and Technology, which will be presented to her in Argentina this year. She also received honorary doctorates in science, is a Fellow of the Royal Society of Chemistry and the Third World Academy of Science, and is a member of the Academy of Science of South Africa. In 2012, she was included in the exhibition of the National Center for Research on Human Evolution, Spain, as one of *12 Names likely to Change the World*.

Prof. Nyokong is widely regarded as a continental icon. What she has achieved in scholarly terms is quite staggering, as assessed by volume, impact, and influence of her work nationally and internationally. She exudes passion for science – doing science, teaching science, promoting science, financing science, applying science, and contributing to national and international policy and strategy to foster and grow scientific research in developing countries. Most particularly, Prof. Nyokong is passionate about passing on knowledge, her students are her life, as is evidenced by her many graduates currently carving their own careers across the globe.

NRF AWARDS 2013

Programme Director

Dr Gillian Arendse

Welcome Address

Dr Albert van Jaarsveld
NRF Chief Executive Officer

Elsevier Address

Mr JC Heyneke
Science and Technology Sales Business Development

Awards Presentation

- Recognition of P-Rated Researchers / Elsevier Young Scientists
 - Recognition of A-Rated Researchers

Special Awards

- Transformation of the Science Cohort
- Champion of Research Capacity Development at South African Higher Education Institutions
 - Lifetime Achievement

Keynote Address

Mr Derek Hanekom
Minister of Science & Technology

Entertainment

Khanya Matomela Jazz Band

Cocktails