

# Top scientists recognised at Women in Science Awards

The Department of Science and Technology (DST) rewards scientific excellence by women researchers at its annual Women in Science Awards (WISA). The winners were announced on 17 August 2017.



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#### **Natural and Engineering Sciences**

Winner: Professor Alta Schutte (North West University): Schutte was the first researcher to investigate the correlation between high blood pressure and cardiovascular disease in black African populations. Her work has influenced health policy across the continent. She is chair of the South African Research Chairs Initiative (SARChI) Early Detection and Prevention of Cardiovascular Disease programme, funded by the Department of Science and Technology. She is the director of the Medical Research Council's Extramural Unit for Hypertension and Cardiovascular Disease and VP of the International Society of Hypertension. Schutte sits on the Expert Advisory Panel of TAG Tobacco, Alcohol and Gambling Advisory, Advocacy and Action Group.

#### **Humanities and Social Sciences**

Winner: Professor Azwiihangwisi Mavhandu-Muduzi (University of South Africa): A professor in the department of health studies and a nurse, Mavhandu-Muduzi's research focuses on new HIV infections and improving the quality of life of HIV-positive students at rural universities. She developed new guidelines for advocacy, care and support for lesbian, gay, bisexual, trangender, intersex and queer students. These new guidelines and the management model she developed have helped to empower HIV-positive women as well as gay and non-gender conforming women in the workplace.

### Research and innovation leading to socioeconomic impact

Winner: Professor Henrietta de Kock (University of Pretoria): De Kock's research into the sensory properties of food and beverages contributes to the wellbeing of African consumers. With a growing urban population to feed, her work looks at ways to use Africa's biodiversity to create food that is nutritious and appetising.

# Distinguished young woman researchers

•	Natural and Engineering Sciences - Winner: Dr Philiswa Nomngongo (University of Johannesburg): A lecturer in
	analytical chemistry, Nomngongo's nanotechnology research focuses on environmental pollution monitoring,
	desalination and water treatment.

- Humanities and Social Sciences Winner: Professor Roula Roula Inglesi-Lotz (University of Pretoria): An
  associate professor in the department of economics, Inglesi-Lotz runs a research methodology course for honours
  students and has supervised 12 MCom students. She sits on the editorial board of the Journal of Energy of Southern
  Africa and developed the first course on energy and environmental economics at masters level.
- Research and innovation leading to socioeconomic impact Winner: Dr Lephoto Tiisetso (University of Witwatersrand): Last year Tiisetso was one of 87 women selected to participate in the TechWomen Emerging Leaders programme. She is also one of the Mail and Guardian's 200 Young South Africans to watch. Her research in molecular genetics involves finding insect killing nematodes to naturally control pests in agriculture.

### Tata Masters scholarships

- Nomabhongo Masana (Central University of Technology): Masana's research focuses on the benefits of cloud-based computing and how the technology can be integrated into the public sector health service.
- Yonela Mgwebi (University of the Witwatersrand): Mgwebi's research involves non-corrosive coatings for metals used in power generation. Her research aims to find cost effective ways to produce energy and steel.
- Emily Muller (University of Cape Town/African Institute for Mathematical Sciences South Africa): Muller is
  researching how social networks influence student performance with the hope of building predictive models to improve
  organisational structures.

# **Tata Doctoral scholarships**

- Marilize Everts (University of Pretoria): A published researcher, Everts is looking at ways to improve heat transfer in power generation equipment.
- Loretta Magagula (University of Cape Town): A PhD student, Magagula is researching cancer-causing mutations in African populations. She is concentrating an breast and colorectal cancers, which are widespread in the black African population.
- Funeka Nkosi (University of Johannesburg/Council for Scientific and Industrial Research): Working from the council's labs, Nkosi is reasearching ways to improve the performance of lithium-ion batteries. She is testing manganese oxide-based metals to find ways to use locally mined minerals.

The theme for the 2017 WISA was 'Women's economic empowerment in the changing world of work', which is the 2017 priority theme for the United Nations Commission on the Status of Women (UNCSW).

The Minister of Science and Technology, Naledi Pandor, remarked, "The Women in Science Awards shows that women and girls can succeed and excel in science and research. Our finalists are in engineering, genetics, conservation, health,

educatio	n and information techno	ogy, among	other fields.	I hope that,	by sl	howcasing th	neir exc	ceptional	achieven	nents.
younger	women will be inspired to	follow in the	ir footsteps.'	,						

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