



**NSTF-BHP Billiton Awards 2013/14**

## Winners of the 2013/14 NSTF-BHP Billiton Awards

Today's research ... tomorrow's innovation

Outstanding contributions to scientific research, technological innovation, management, capacity building and science communication were announced and celebrated in Gauteng on Thursday, 3 July 2014, at the 16th Annual NSTF-BHP Billiton Awards Gala Dinner.

According to the chairman of the adjudication panel, Mr Denis Hunt, the event saw an increased number of nominations, reflecting robust participation across all sectors, levels, gender and race, by researchers in and contributors to science and technology. "This is a reflection of the wealth of research and development being done in South Africa," he said.

BHP Billiton SA Chairman, Xolani Mkhwanazi said, "BHP Billiton's involvement in initiatives such as the NSTF gives us (BHP Billiton) the unique opportunity to connect with those people and communities who seek to innovate, create and discover as much as we do. It is this talent that will drive the scientific, technological and engineering development of our country and help South Africa achieve its goal of long-term economic and environmental sustainability.

The awards were presented by the Honourable Minister of Science and Technology, Ms Naledi Pandor, who is also the patron of the event, and celebrated along with almost 600 guests from the broader science community.

Details on the work of the award winners is accessible online at [nstfawards.org.za](http://nstfawards.org.za)

### The 2013/14 Award winners are:

**Professor Eric Bateman** (*Emeritus Professor and Director, University of Cape Town Lung Institute; and Honorary Consultant, Division of Pulmonology, Department of Medicine, University of Cape Town*) – Award for an outstanding contribution to science, engineering and technology (SET) over a lifetime



**Professor Lyn Wadley** (*Honorary Professor: Department of Archaeology, University of the Witwatersrand*) and



**Professor Keertan Dheda** (*Professor: Division of Pulmonology, Department of Medicine, University of Cape Town and Groote Schuur Hospital*) – TW Kambule NRF-NSTF Awards for an outstanding contribution to SET through research and its outputs over the last 5 to 10 years – sponsored by the NRF



**Professor Wanda Markotter** (*Associate Professor: Natural and Agricultural Sciences, University of Pretoria*) and



**Professor Oriel Matlhahane Thekiso** (*Associate Professor: Department of Zoology and Entomology, University of the Free State*) – TW Kambule NRF-NSTF Awards for an emerging researcher for an outstanding contribution to SET through research and its outputs over a period of up to six years after award of a PhD or equivalent in research – sponsored by the NRF



**Professor Anne Grobler** (*Director of the DST/NWU Preclinical Drug Development Platform, North-West University*) – Award for an outstanding contribution to SET through management and related activities over the last 5 to 10 years



**Professor Brenda Wingfield** (*Professor and Deputy Dean: Faculty of Natural and Agricultural Sciences, University of Pretoria*) and



**Professor Donald Cowan** (*Director: Genomics Research Institute; Director: Centre for Microbial Ecology and Genomics, University of Pretoria*) – Awards for researchers for an outstanding contribution to SET through research capacity development over the last 5 to 10 years – sponsored by Eskom



**Professor Azwinndini Muronga** (*Associate Professor of Physics and Director of the University of Johannesburg Soweto Science Centre*) – Award for an individual or a team for an outstanding contribution to science, engineering, technology and innovation (SETI) through communication for outreach and creating awareness over the last five years (sponsored by the South African Agency for Science and Technology Advancement [SAASTA])



**Elemental** (*Associate Professor Arnaud Malan, Department of Mechanical Engineering, University of Cape Town*) and



**Hearing Loss Detection by Smartphone** (*Team Leader: Prof De Wet Swanepoel, Department of Speech, Language Pathology and Audiology, University of Pretoria*) – Awards for an individual or a team for an outstanding contribution to SET through research leading to innovation in a corporate organisation or institution





**Treatment Group, Tshwane University of Technology**  
(Team Leader: Professor Johannes Philippus Maree, Rand Water Chair in Water Utilisation and Key Structure Holdings (Pty) Ltd) – Award for an individual or a team for an outstanding contribution to SET through research leading to innovation in a Small, Medium or Micro Enterprise (SMME) – sponsored by the Technology and Human Resources for Industry Programme (THRIP), an initiative of the Department of Trade and Industry (**the dti**)

The [National Science and Technology Forum](#) (NSTF) Awards, hosted in partnership with BHP Billiton since 2011, is the flagship project of the largest, most prominent, multi-stakeholder, [non-profit forum](#) for science, engineering and technology in South Africa – promoting science-related activities through collaborative effort.

### The Brilliants Programme for our future innovators

In conjunction with the NSTF–BHP Billiton Awards, the NSTF runs the [Brilliants Programme](#) aimed at recognising and rewarding first-year science and engineering students (a young man and woman from each of the nine provinces), who obtained top marks in Mathematics and Physical Science in the 2013 National Senior Certificate Examinations. Travel and accommodation for the students are sponsored by the NSTF, enabling them to attend the main Awards Gala Dinner as special guests of honour and gain exposure to the research fraternity of South Africa.

“The Brilliants Programme has been very useful in recognising deserving top performing students, most of whom are previously disadvantaged, and in assisting them to get bursaries,” says Jansie Niehaus, Executive Director of the NSTF. “The THRIP Programme, funded by the dti, has committed to providing bursaries to at least two of these students every year.”

This year nineteen awardees have been recognised and exposed to the research fraternity, and four of these have been awarded a THRIP bursary. The NSTF and its membership congratulate these Brilliant minds on their excellent results.

The Brilliants Awardees are:

#### Eastern Cape

*Miss Vivienne Dames*  
Victoria Girls High School  
BSc (Zoology, Botany)  
Rhodes University



*Mr Yandisa Ndongeni*  
Khanyisa High School  
BEng (Mining Engineering)  
University of Pretoria



#### Free State

*Miss Dimakatso Mosheshe*  
Leseding Technical Secondary  
School  
BSc (Electrical Engineering)  
University of Pretoria



*Mr Malan Bosman*  
Grey Kollege Secondary School  
BEng (Industrial Engineering)  
Stellenbosch University



#### Gauteng

*Miss Zandile Mbonxa*  
Leshata Secondary School  
BSc (Veterinary Sciences)  
University of Pretoria



*Mr Reginald Dhlamini*  
Mohloli Secondary School  
BSc (Chemical Engineering)  
University Of Witwatersrand



**KwaZulu-Natal (2x Females this year)**

*Miss Mikasha Govender*  
**Awarded a THRIP bursary**  
MarkLand Secondary School  
MBChB (Medicine)  
University Of KwaZulu Natal



*Mr Musa Xakaza*  
JG Zuma High School  
BSc (Computer Engineering)  
University of Cape Town



*Miss Teagan van Wyk*  
**Awarded a THRIP bursary**  
Danville Park Girls High School  
MBChB (Medicine)  
University of Cape Town



### **Limpopo**

*Miss Khuthadzo Tshiovhe*  
Patrick Ramaano Secondary  
BSc (Mathematical Science)  
University of Witwatersrand



*Mr Madzanga Muzhelele*  
**Awarded a THRIP bursary**  
Thengwe Secondary  
BEng (Chemical Engineering)  
University of Pretoria



### **Mpumalanga**

*Miss Leané Van Der Merwe*  
Hoerskool Hoogenhout  
BSc (Veterinary Sciences)  
University of Pretoria



*Mr Simon Chili*  
**Awarded a THRIP bursary**  
Kwandebele Science Combined  
School  
B Eng (Mechanical  
Engineering)  
University of Cape Town



### **North West**

*Miss Tshimologo Phorotlho*  
Batswana High Commercial  
School  
BEng (Electrical Engineering)  
University of Witwatersrand



*Mr Tebogo Raseroka*  
Mmankala High School  
BEng (Electrical Engineering)  
University of Pretoria



### **Northern Cape**

*Miss Matlhogonolo Olepeng*  
Galaletsang High School  
B Eng (Mechanical  
Engineering)  
University of Witwatersrand



*Mr Rebakakgosi Mohutsiwa*  
Pampierstad High School  
B Eng (Mechanical  
Engineering)  
University of Witwatersrand



### **Western Cape**

*Miss Ruth Meek*  
Worcester Gimnasium  
BEng (Chemical Engineering)  
Stellenbosch University



*Mr Peter Thompson*  
York High School  
BSc (Mathematical Science)  
Stellenbosch University



We also call on more organisations that can provide bursaries to form partnerships with the NSTF's youth programmes. Email: [enquiries@nstf.co.za](mailto:enquiries@nstf.co.za) or contact the NSTF Office at the contact details below.

### **Share 'n Dare Programme – Publicity and Outreach Campaign with Winners**

This prestigious recognition also profiles the winners as role models to thousands of young people at Science Centres and Universities across the country, through an outreach programme named the **Share 'n Dare Programme**. In this programme, the youth are inspired by the Award winners to take up careers in the sciences and engineering. Thousands of South Africans are also reached through community and

campus radio station interviews, as well as the Awards media partnerships with Business Report and Mail & Guardian, ensuring that not only the winners but also their employers are recognised as experts in their fields.

The next round of the Share 'n Dare Programme will now kick off. See [the list of activities](#) in which the past round of winners participated during 2013-14 and grab hold of this unique opportunity to brand your organisation amongst the youth.

The outcomes of all the interactive activities are evaluated annually, for the impact of information shared with the community at large and for continued suitability. The results indicate the widespread reach of the Awards brand nationwide to learners, students, communities, as well as the general public.

Organisations are invited to join hands with the NSTF and widen the reach of the programme by inviting Award winners through the NSTF Office to inspire and motivate the youth at any of their outreach programmes. To make this possible, contact Ms Makwena Ramaru at the contact details below.

The theme for the 2013/14 NSTF-BHP Billiton Awards gala dinner is **Crystallography**, as declared by the United Nations as an International Year for 2014, to commemorate not only the centennial of X-ray diffraction, which allowed the detailed study of crystalline material, but also the 400th anniversary of Kepler's observation in 1611 of the symmetrical form of ice crystals, which began the wider study of the role of symmetry in matter.

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**[What do you think of the NSTF-BHP Billiton Awards eNewsletter?](#)**

If you have any comments or suggestions on how we can improve this newsletter, please email the NSTF Secretariat at [enquiries@nstf.co.za](mailto:enquiries@nstf.co.za)

The **National Science and Technology Forum** (NSTF), established in 1995, is a broadly-representative stakeholder body for all SETI organisations in South Africa, which seeks to influence policy formulation and delivery.

The **NSTF-BHP Billiton Awards** are unique in SA, recognising the outstanding contributions of individuals and groups to SETI.

[www.sciencebursaries.org.za](http://www.sciencebursaries.org.za) - SET for life! This exciting web portal is a 'one-stop shop' for learners and students who are interested in pursuing a career in the sciences, engineering or technology.

**Catch us on our mobi site**

Easy access to NSTF news on your cell phone! [www.nstf.org.za/mobi/](http://www.nstf.org.za/mobi/)

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**E-mail: [enquiries@nstf.co.za](mailto:enquiries@nstf.co.za) Tel: 27 12 841 3987 Fax: 27 12 841 3025**

**Non Profit Company Registration Number: 2007/029165/08 NPO registration nr. 92042**

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