



NATIONAL SCIENCE AND TECHNOLOGY FORUM

S.E.T. for socio-economic growth



www.nstfawards.org.za

Winners of the 2014/2015 NSTF Awards, in partnership with South32

The 17th National Science and Technology Forum (NSTF) Awards Gala Dinner, in partnership with South32, was held in Gauteng on Thursday, 9 July 2015. Contributions to excellence in science, engineering, technology and innovation (SETI) were awarded and celebrated in the following areas:

- Scientific research
- Technological innovation
- Environmental sustainability/Green Economy
- Technology transfer, education and training
- Capacity building
- Management
- Communication and outreach

SA needs to develop new products, technologies and services: As previously stated by the Minister of Science and Technology, Ms Naledi Pandor, South Africa's science mission is to create wealth, thereby creating jobs and eradicating poverty. Its success depends on our ability as a nation to develop new products, technologies and services.

About the awards, the NSTF and the outstanding contributions from scientists, engineers and other professionals: The NSTF Awards is the flagship project of the NSTF, the most representative multi-stakeholder non-profit forum in South Africa promoting science and technology through collaborative effort. The awards are a showcase of the research and development capacity of our nation through the scientists, engineers and other professionals that the awards recognise and reward. Their competitive spirit, appetite for success and vision of excellence are made clear through the outstanding contributions they make in achieving wealth, health, social upliftment and a better life for all in South Africa.

What makes these awards special: The national NSTF Awards are the largest SETI awards in South Africa and they were also the first science awards in the country. They are also the only awards that are open, involving the public in the nomination process. The focus is on spreading information about SETI to the public including the year-long engagement process with students and learners called 'Share 'n Dare'.

Award winners: The awards were presented by the Honourable Minister of Science and Technology, Ms Naledi Pandor, who is also the patron of the event. She celebrated along with almost 600 guests and over 40 different organisations from the broader community. Below are the winners, including the winner of the special Photonics Award celebrating UNESCO's International Year of Light and light-based technologies. (Details of the award winners' work are available online at www.nstfawards.org.za.)

These are awards for an outstanding contribution to science, engineering, technology or innovation:

Category	Winners' names and details
<p>For a contribution over a lifetime: by an individual</p>	 <p>Professor Helen Rees Executive Director, Reproductive Health and HIV Institute, University of the Witwatersrand (Wits) and UNAIDS Collaborating Centre and Personal Professor, Department of Obstetrics and Gynaecology, Wits and Honorary Professor, Department of Clinical Research, London School of Hygiene and Tropical Medicine</p> <p>For her contributions in the field of HIV prevention, reproductive health and vaccines, where she enjoys global recognition and as a public health strategist with a unique ability to translate research into policy and practice</p>
	 <p>Professor Robert Scholes Research Group Leader, The Council for Scientific and Industrial Research (CSIR) until December 2014 and Distinguished Professor of System Ecology, Wits from 2015</p> <p>For his contribution in the realms of environmental science, systems ecology, savannah ecology and global change, where he enjoys worldwide recognition as an extraordinary scientist</p>
<p>Special Photonics Award: by an individual in celebration of UNESCO's 'International Year of Light and Light-based Technologies'</p>	 <p>Professor Andrew Forbes Professor, School of Physics, Wits as of March 2015; previously Chief Researcher, CSIR National Laser Centre (2005–2015)</p> <p>For significant contributions to photonics in South Africa through basic research and innovations that have led to commercialisation</p>
<p>TW Kambule-NSTF Awards: for research and its outputs over the last 5–10 years by an individual</p>	 <p>Professor Zander Myburg Professor in Forest Genomics and Biotechnology, Department of Genetics and Forestry and Agricultural Biotechnology Institute and Genomics Research Institute, University of Pretoria</p> <p>For research which has uncovered the genomic control of wood formation in fast-growing Eucalyptus trees which is significant for fuel production</p>
	 <p>Professor Dan Stein Professor and Head, Department of Psychiatry and Mental Health and Director, Brain-Behaviour Initiative, University of Cape Town and Director, Stellenbosch University/University of Cape Town/Medical Research Council Unit on Anxiety and Stress Disorders</p> <p>For a major contribution to advancing basic and clinical neuroscience, with research ranging from laboratory research on animal models through to clinical investigations on the neurobiology and treatment of neuropsychiatric disorders and epidemiological and public mental health research</p>

Category	Winners' names and details
<p>For research capacity development over the last 5–10 years: by an individual (sponsored by Eskom)</p> 	<div data-bbox="513 340 683 510">  </div> <p>Professor Jennifer Jelsma Professor, Department of Health and Rehabilitation Sciences, Faculty of Health Sciences, University of Cape Town</p> <p>For her achievement as one of the first physiotherapists in South Africa to obtain her PhD and, as such, has been in the forefront of developing a culture of research in the rehabilitation sciences</p> <hr/> <div data-bbox="513 616 683 786">  </div> <p>Professor Nigel Bennett Austin Roberts Chair of Mammology and SARChi, Mammal Behavioural Ecology and Physiology, University of Pretoria</p> <p>For his outstanding contribution to research in the field of mammalogy, including the students he mentored in the process</p>
<p>TW Kambule-NSTF Awards: to an emerging researcher (post-doctoral in a period of up to six years after the award of a PhD or equivalent in research)</p> 	<div data-bbox="513 875 683 1046">  </div> <p>Dr Thulani Makhwanyane Lecturer, Department of Genetics and Researcher, Centre for Microbial Ecology and Genomics, University of Pretoria</p> <p>For his exceptional performance and contributions in the field of microbial ecology of hot and cold deserts as an emerging researcher and specialist</p> <hr/> <div data-bbox="513 1115 683 1285">  </div> <p>Dr Grant Theron Senior Research Officer, Department of Medicine, University of Cape Town</p> <p>For his contribution to the advancement of TB diagnosis through, among other things, the invention of a device to measure patients' infectiousness</p>
<p>NSTF-GreenMatter Award: by an individual or an organisation towards achieving biodiversity conservation, environmental sustainability and a Greener Economy)</p> 	<div data-bbox="513 1368 683 1538">  </div> <p>Biological Control Research Group – Professor Martin Hill Head of Entomology and Director, Department of Zoology and Entomology, Rhodes University</p> <p>For running a project in biological control of invasive aquatic weeds that helps to return invaded aquatic ecosystems to functioning states and includes community engagement</p>
<p>For communication for outreach and creating awareness by a team or individual</p>	<div data-bbox="513 1688 683 1859">  </div> <p>Ms Marina Joubert Researcher and Lecturer, Centre for Evaluation, Science and Technology, Stellenbosch University</p> <p>For her pioneering contribution to promoting and developing science communication as a field of practice and research in South Africa</p>

Category	Winners' names and details
For research leading to innovation by a team or individual through a corporate organisation	 <p>Professor Deon de Beer Department of Innovation Support and Technology Transfer, North-West University</p> <p>For playing a leading role in the establishment of additive manufacturing in South Africa</p>
For research leading to innovation by a team or individual in an SMME (sponsored by THRIP, an initiative of the Department of Trade and Industry)	 <p>Antrum Biotech Ms Khilona Radia, CEO and Team Leader</p> <p>For the promotion and development of an accurate rapid test for extra pulmonary TB that will save lives and reduce healthcare-related costs</p>
To a non-governmental organisation (including non-profit companies and community-based organisations) through technology transfer and education and training activities	 <p>Western Cape Primary Science Programme Ms Zorina Dharsey, Director</p> <p>For supporting and promoting quality primary science and mathematics teaching and learning as the basic building blocks for children to succeed and pursue further education and employment opportunities</p>

The NSTF and its seven distinct partners and sponsors take pride in congratulating the 2014/2015 NSTF Award winners!

The NSTF Brilliants Programme: In conjunction with the awards, the NSTF runs the Brilliants Programme that recognises and rewards first year science and engineering students. A young man and woman are chosen from each of the nine provinces. These students must have received top marks in mathematics and physical science in the 2014 National Senior Certificate Examinations. These students were honoured as our future talent and innovators and gained unique exposure to the research fraternity of South Africa.

Sponsored by the Department of Science and Technology, the two-day programme for the Brilliants Programme students included inspiration and motivation through a personal and professional development programme, as well as a tour of projects that showcase the most brilliant work by South African scientists, engineers and other professionals. The tour included a visit to the CSIR National Laser Centre, where light was shed on the Centre's laser technology knowledge, expertise and applications. This was followed by an exciting tour by Aerosud, and presentation about the AHRLAC aircraft (Advanced High Performance Reconnaissance Light Aircraft), developed in South Africa and designed as an inexpensive, more versatile substitute for unmanned aerial vehicles. The students went back to varsity with the motivation to continue their studies, and with renewed national pride! (Details of the recipients of the Brilliants Programme are available online at www.nstfawards.org.za under the Education section.)



Ms Jansie Niehaus
Executive Director and Spokesperson
Cell: 082 863 1504
NSTF, the non-profit stakeholder body for all science, engineering, technology and innovation (SETI) organisations in South Africa