

Winners of the 2018/19 Science Oscars

The NSTF-South32 Awards - known as the 'Science Oscars' - were held at a prestigious gala dinner in Gauteng on Thursday, 27 June 2019. It is the 21st celebration of excellence through this flagship project of the National Science and Technology Forum (NSTF).



The NSTF Briliants Programme candidates

Outstanding contributions to science, engineering and technology (SET) and innovation were awarded in the following broad areas under 13 categories:

- Scientific research
- Innovation
- Management and related activities
- Capacity development in engineering research
- Environmental sustainability, biodiversity conservation and the green economy
- Water research and innovation
- Data management
- Science communication

The special annual theme award was made for an outstanding contribution to 'Materials for inclusive economic development', in recognition of the 'International Year of the Periodic Table of Chemical Elements' declared by the United Nations.

The national NSTF-South32 Awards are the largest SET and innovation awards in South Africa. They are known as the 'Science Oscars' and were the first science awards in the country. The Honourable Minister of Higher Education, Science and Technology, Dr Blade Nzimande, is the event's patron. The focus is on spreading information about SET to the public, which includes the year-long engagement programme with students and learners called the 'Share 'n Dare Programme'. The NSTF Briliants Programme recognises the outstanding Grade 12 performers in physical science and mathematics, exposing them to the SET network and future career opportunities.

Award winners

Lifetime Award

Prof Robin Crewe - Senior Research Fellow: Centre for the Advancement of Scholarship, University of Pretoria (UP): The complete bee person – a legend of SA science and science institutions.

TW Kambule-NSTF Award: Researcher

Prof Lindiwe Innocentia Zungu - Executive Dean: Graduate Studies, Unisa – University of South Africa: For innovatively crafting health and safety guidelines for the Mining and Health Safety Council and simultaneously designing women-specific safety gear bespoke for the underground mining conditions.

TW Kambule-NSTF Award: Emerging researcher

Dr Mardé Helbig - Senior lecturer: Computer Science Department (Dept), UP: For the evaluation of the performance of dynamic multi-objective optimisation algorithms.

Dr Hlumani Ndlovu - Lecturer: Division of Chemical and Systems Biology, Dept of Integrative Biomedical Sciences, University of Cape Town (UCT): For research involving elucidated immunological mechanisms modulating fibrogranulomatous liver pathology and mediating protective immunity.

Management Award

Dr Happy Marumo Sithole - Director: Centre for High Performance Computing (CHPC), CSIR – Council for Scientific and Industrial Research: For developing world-class High Performance Computing (HPC) capabilities in SA and empowering Africa.

Engineering Research Capacity Development Award

Prof Alison Lewis - Dean: Faculty of Engineering and the Built Environment, UCT: For training, nurturing and mentoring students in the Crystallization and Precipitation Research Unit at UCT through new research into the recovery of valuable metals, water and minerals through innovative methods.

Prof Elvis Fosso-Kankeu - Associate Professor: School of Chemical and Minerals Engineering, North-West University: For monitoring environmental water to raise awareness among poor communities and nationally.

NSTF-Lewis Foundation Green Economy Award

Process, Energy & Environmental Technology Station (UJ-PEETS)

Manager: Ms Nicoleen Janse van Rensburg, University of Johannesburg: For enabling technology transfer and interaction between academia and SMMEs to stimulate and support technology innovation in the green economy by providing

subsidised engineering services to SMMEs in the green economy.

NSTF-Water Research Commission (WRC) Award

Prof Martine Visser - Director: Environmental Policy Research Unit; and Professor: Economics, School of Economics; and Research Chair: African Climate Development Initiative, UCT (and in the NSTF-Lewis Foundation Green Economy category): For spearheading a project with the City of Cape Town, in which behavioural nudges were successfully used to conserve water during the water crisis.

Data for Research Award

Prof Tandi Matsha - Department of Science and Technology / National Research Foundation SARCHI (South African Research Chair Initiative) Chair: Cardio Metabolic Health, Cape Peninsula University of Technology: For research into Epigenetics and transcriptome analysis of type 2 diabetes mellitus.

Innovation Award: Corporate Organisation

Centre for Rapid Prototyping and Manufacturing (CRPM) Unit, Central University of Technology
Director and Team Leader: Mr Gerrie Booysen - The CRPM team uses 3D printing to rebuild deformed faces of South Africans from poor backgrounds pro bono.

Innovation Award: Small, Medium and Micro Enterprise (SMME)

Hydrox Holdings (Pty) Ltd Team
Chief Executive Officer and Team Leader: Mr Cornelis Johannes de Jager - For an innovative new production method to provide hydrogen inexpensively and totally pollution free.

Communication Award

Wits Communications Services
Head: Shirona Patel, Wits - The Wits Communication Services team is committed to inspiring curiosity, creating new knowledge, making research accessible and impacting on society through innovative science communication.

Non-Governmental Organisation (NGO) Award

Eskom Expo for Young Scientists
Executive Director: Mr Parthy Chetty - The Eskom Expo for Young Scientists (Expo) creates excitement for science through research-based projects and encourages more students to take up science-oriented subjects and careers

Special Annual Theme Award: Materials for inclusive economic development

Prof Alexander Quandt - Acting Chair: Materials for Energy Research Group; and Focus Area Co-ordinator: Centre of Excellence in Strong Materials, University of the Witwatersrand: For his pioneering work in computational materials science with applications to nano-materials, optics/photonics and renewable energy research.