

## Winners of the 2019/2020 NSTF-South32 Awards

## #NSTFawards2020

The live streamed Gala Event of the prestigious <u>NSTF-South32 Awards</u> took place on Thursday, 30 July 2020. It is the 22<sup>nd</sup> celebration of South African excellence through this flagship project of the <u>National Science</u> and <u>Technology Forum</u> (NSTF).

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

- Scientific research
- Innovation
- Management and related activities
- Capacity development in engineering research
- Environmental sustainability and biodiversity conservation
- Water research and innovation
- Data management
- Science communication for awareness and outreach

This year the <u>Special Annual Theme Award</u> is made for an outstanding contribution to SET and innovation through research and development, and innovation in Plant Health. (The annual theme for 2020 is Plant Health aligned with the International Year of Plant Health, as declared by the United Nations.)

**About the NSTF and the awards:** The NSTF is the most representative multi-stakeholder non-profit forum in South Africa promoting science, engineering and technology (SET) and innovation. The <a href="NSTF-South32 Awards">NSTF-South32 Awards</a> showcase the research and development capacity of our nation. The excellent output of the winners supports South Africa's advancement, economic growth and the social upliftment of our people.

Why are these awards different? 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. An important aspect of the Awards is the showcasing of South African SET to the public, which includes the year-long engagement programme between NSTF-South32 Award Winners, students and learners, called the <a href="NSTF Share">NSTF Share</a> 'n Dare Programme. These top scientists share their knowledge and experiences with young people, 'daring' them to follow in their footsteps.

The NSTF <u>Brilliants Programme</u> recognises two outstanding Grade 12 performers in physical science and mathematics from each province exposing them to the Award winning scientists and the world of professional SET work. They are also introduced to the public through the NSTF-South32 Awards Gala Event.

## **Award winners**

The awardees were announced and celebrated online, making the ceremony accessible to many more than the usual 600-700 guests. It is an honour to be <u>nominated</u>, an outstanding achievement to reach the <u>finals</u> and an exceptional milestone and celebration of excellence to win one of these awards.

The NSTF and its sponsors congratulate the 2019/2020 NSTF-South32 Award winners.

## **Lifetime Award**

Prof Michèle Ramsay – Professor: Human Genetics; Director: Sidney
Brenner Institute of Molecular Bioscience; and Chair: Department of Science and
Innovation (DSI) / National Research Foundation (NRF) South African Research Chair
Initiative (SARChI): Bioinformatics and Genomics of African Populations, University of
the Witwatersrand (Wits)

For her pioneering genomic medicine approaches in Africa and leading the transcontinental study on factors that contribute to African diseases.

## TW Kambule-NSTF Award: Researcher

Prof Christine Lochner – Co-Director: South African Medical Research
Council Unit on Risk and Resilience in Mental Disorders, Department (Dept) of
Psychiatry, Stellenbosch University (SU)
 For her research into neuropsychiatric disorders, including obsessive-compulsive and
related disorders, which fosters a multi-disciplinary approach, incorporating a

## TW Kambule-NSTF Award: Emerging Researcher

Prize sponsor: proSET (Professionals in SET), a sector of the NSTF representing professional bodies and learned societies

- Dr Vhahangwele Masindi Research Scientist: Magalies Water; and Principal Researcher: Council for Scientific and Industrial Research (CSIR); and Research Fellow: University of South Africa; and Part-time Lecturer: University of Venda For his specialization in the valorization and beneficiation of wastewater through drinking water reclamation and minerals synthesis.
- **Prof Richard Walls** Associate Professor: Fire Engineering Research Unit, SU For conducting research and education to improve informal settlement fire safety as well as structural fire design both crucial to ensuring safety in our communities.

## **Management Award**

biopsychosocial focus.

• **Professor Judith Kinnaird** – Associate Professor and Director: Economic Geology Research Unit; and Co-Director: DSI Centre of Excellence for the Study of Mineral and Energy Deposits, School of Geosciences, Wits For directing economic geology research studies on metals for everyday needs now and for the future.

# **Engineering Research Capacity Development Awards**

Sponsor: Eskom since 2003

- Prof Josua P Meyer Professor and Head: Dept of Mechanical and Aeronautical Engineering; and Chair: School of Engineering, Built Environment and Information Technology, University of Pretoria For developing large numbers of engineering research graduates of the highest quality.
- Dr Abimbola Olukemi Windapo Associate Professor: Dept of Construction Economics and Management, University of Cape Town For her research of construction business and management that confronts the problems of poor project and organisation performance from a practice perspective.

## **NSTF-Lewis Foundation Green Economy Award**

Sponsor: The Lewis Foundation since 2019

 Sharksafe (Pty) Ltd – CEO and Co-Inventor: Prof Conrad Matthee, Dept of Botany and Zoology, SU For developing the SharkSafe Barrier™ that is the first shark specific barrier which is eco-friendly and can protect swimmers and surfers without harming the marine life.

# **NSTF-Water Research Commission (WRC) Award**

Sponsor: WRC since 2017

 Prof Faizal Bux – Director and Professor: Institute for Water and Wastewater Technology; and Chair: DSI/NRF SARChI: Wastewater Treatment, Durban University of Technology For researching wastewater as a resource and not a burden to society.

## **Data for Research Award**

South African Population Research Infrastructure
Network (SAPRIN) – Co-Directors: Prof Mark Collinson and Dr Kobus
Herbst, Wits Rural Campus, Mpumalanga For collectively conceiving, developing and
implementing SAPRIN, which produces up-to-date information on health and socioeconomic wellbeing, representative of South Africa's (SA) population, for scientific
analysis, embedding research projects and policy evaluation.

# **Innovation Award: Corporate Organisation**

• The Smart Spectrum Sharing Team – Team Leader and Chief Research Scientist: Dr Fisseha Mekuria, CSIR For developing the Smart Spectrum Sharing Technology (S3T) for a Smarter ICT Infrastructure and Digital Inclusion.

# Innovation Award: Small, Medium and Micro Enterprise

Sponsor: National Intellectual Property Management Office (NIPMO) since 2019

 Memeza Shout (Pty) Ltd – Director: Ms Thulile Mthethwa For reducing crime, improving the South African Police Service (SAPS) service levels and creating jobs through innovative communication technology and a private/public partnership business model.

# **Communication Award**

Prof Jeanine Marnewick – Research Chair: Biotechnology and Director:
 Applied Microbial and Health Biotechnology Institute, Cape Peninsula University of Technology For leading a team that promotes rooibos tea, to be included in a personal daily regime as a health promoting option, supported by science.

## **Non-Governmental Organisation (NGO) Award**

 Mothong African Heritage – Founder Member, Executive Director and Overseer: Traditional Doctor Ephraim C Mabena — For uniting scientists, government and the community through the Mothong African Heritage in nature conservation, technology innovation for socio-economic development using indigenous knowledge systems and modern sciences.

## **Special Annual Theme Award: Plant Health**

• **Prof Michael Wingfield** – Professor: Forestry and Agricultural Biotechnology Institute; and Adviser to the Executive, University of Pretoria For being globally recognised as a SA plant pathologist for a lifetime of contributions to the identification and management of plant diseases, as well as the education and mentorship of large numbers of plant pathologists and entomologists globally.

## Partners and sponsors:

- South32 (co-branding sponsor)
- <u>Business Report</u> and <u>Mail & Guardian</u> (media sponsors)
- Eskom, NIPMO, The Lewis Foundation, and WRC (category sponsors)
- Department of Science and Innovation (platinum sponsor)
- The Carl & Emily Fuchs Foundation (youth outreach sponsor)
- proSET (prize sponsor)
- proSET and the South African Council for Natural and Scientific Professions
- EventBank (technology partner)

## **About the NSTF**

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

The NSTF Awards are unique in SA, recognising the outstanding contributions of individuals and groups to SET and innovation.

The science <u>bursaries</u> page provides information on bursaries and bursary providers for science, engineering and related studies.

The NSTF has taken all practical measures to ensure that the material contained in this newsletter is correct. The NSTF reserves the right to make changes as it deems necessary.

Registration details submitted to the NSTF will be treated confidentially and will only be used by NSTF to

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