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NSTF-South32 Awards



Finalists announced: NSTF-South32 Awards 2022/2023

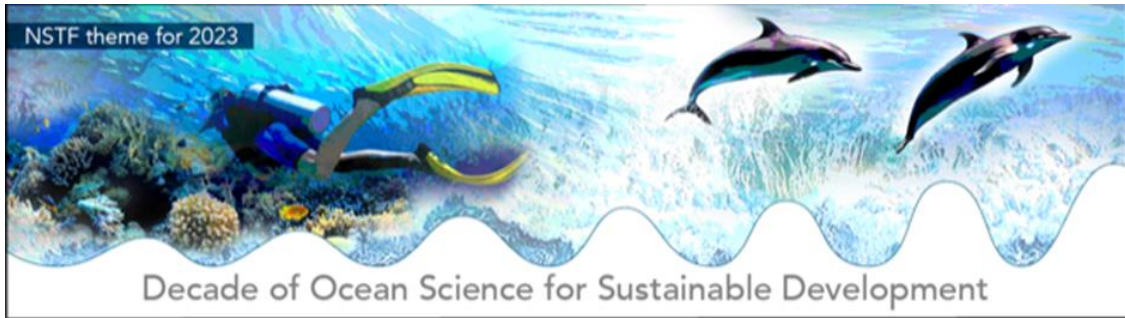
**Recognising excellence and outstanding contributions to science, engineering and technology (SET) and innovation in South Africa
#NSTFawards2023**

The [National Science and Technology Forum \(NSTF\)](http://www.nstf.org.za) is pleased to announce the finalists contending for the prestigious 2022/2023 NSTF-South32 Awards. This is the 25th year of the annual [NSTF-South32 Awards](http://www.nstf.org.za).

The NSTF-South32 Awards & Silver Jubilee: The [NSTF Awards](http://www.nstf.org.za) were established in 1998 as a collaborative effort with [members](http://www.nstf.org.za) and stakeholders to recognise outstanding contributions to science, engineering and technology (SET) and innovation by SET-related professionals, teams and organisations in South Africa. This includes experienced scientists, engineers, innovators, science communicators, engineering capacity developers, and organisational managers/leaders, as well as data and research managers.

Our partner: [South32](http://www.south32.com) is a resources company and longstanding partner of the annual NSTF Awards for the 8th year now, anchoring this endeavour to ensure the non-profit activities of the NSTF.

The 'Science Oscars': The NSTF-South32 Awards are referred to as the 'Science Oscars' of South Africa. They are the largest, most comprehensive, and sought-after national awards of their kind in the country. They were also the first science awards in South Africa.



Special Annual Theme Award: The theme for the 2022/2023 NSTF-South32 Awards is **ocean science for sustainable development**. This is in recognition of the [United Nations \(UN\) decade of Ocean Science for Sustainable Development](#). The 25th annual [Awards Gala Event](#) will not only celebrate this theme on **13 July 2023**, but also present a [special annual theme award](#) for an outstanding contribution in this area.

What's new this year?

The NSTF supports the principle of collaborative, widely-inclusive awards. The NSTF is proud to welcome new partners and prize sponsors as follows:

- **New NSTF-SAMRC Clinician-Scientist Award:** The South African Medical Research Council (SAMRC) is sponsoring a new award for an outstanding contribution by a [clinician-scientist](#), with a focus on work to enhance life and to improve the health of the community. This new category is modelled on the emerging researcher category.
- **New SAYAS as a new prize sponsor:** The South African Young Academy of Science (SAYAS) is the new prize sponsor for the [TW Kambule-NSTF Emerging Researcher category](#). Prizes of R20 000 each will be awarded to the two winners to supplement their research funding.
- **A prize for an established category:** The [TW Kambule-NSTF Researcher category](#) now has a prize sponsor for the first time, which is proSET (the professional bodies and learned societies sector of the NSTF). The prize money is R20 000 to supplement the winner's research funding.

The NSTF's vision

A transformed country where SET and innovation contribute to an optimal quality of life for all, where STEM and innovation education and training are effective, and SET professionals are representative of the population. (SET = science, engineering and technology.) (STEM = science, technology, engineering and mathematics.)

Realising the vision: The NSTF-South32 Awards is the NSTF's flagship project and one among [other strategic activities](#) through which the NSTF realises this [vision](#).

[Partnerships](#) for specific awards (such as with the Water Research Commission (WRC), National Intellectual Property Management Office (NIPMO), Eskom and now the SAMRC) recognise contributions that have the potential to make a [positive impact](#) on South Africa, and on the world.

2022/2023 NSTF-South32 Awards finalists

It is an extraordinary honour to be a finalist; given the quality of the [nominations](#) received, the fierce competition that nominees face, and the interest from the community every year.

Join the [NSTF membership](#) and pioneering [partners/sponsors](#) in applauding the 2022/2023 NSTF-South32 Awards [finalists](#). These comprise individuals, teams and organisations, as applicable, who have made an **outstanding contribution to SET and innovation in South Africa** under the [categories](#) below:

- *The phrases in italics at the end of the citation of the nominee indicates that a nominee qualified as a finalist under more than one category and mentions the applicable category/ies*
- *Listed alphabetically according to the surname of nominee or name of team/organisation under each category*

Lifetime Award

- **Prof Nigel C Bennett** – Austin Roberts Chair: Mammalogy, University of Pretoria (UP); and Professor: Zoology, Department (Dept) of Zoology and Entomology, UP
- **Prof Clive Gray** – Professor: Immunology in Molecular Biology and Human Genetics, Stellenbosch University (SU); and Emeritus Professor: Immunology, University of Cape Town (UCT)
- **Prof Juliet Hermes** – Professor: Dept of Oceanography, UCT; and Honorary Professor: Institute of Coastal and Marine Research, Nelson Mandela University (NMU); and Manager: Egagasini Node, South African (SA) Environmental Observation Network (SAEON); and Acting Manager: SA Polar Research Infrastructure, SAEON; and *also in the Special Annual Theme category**
- **Prof Jonathan Jansen** – Distinguished Professor: Education, SU; and President: Academy of Science of South Africa (ASSAf)
- **Prof Onesimo Mutanga** – Professor: Remote Sensing, University of KwaZulu-Natal (UKZN); and Chair: Department of Science and Innovation (DSI) / National Research Foundation (NRF) South African Research Chair Initiative (SARChI) in Land Use Planning and Management, UKZN; and *also in the Engineering Research Capacity Development category**
- **Prof Francesco Pettrucione** – Professor: Quantum Computing, School of Data Science and Computational Thinking, SU; and Interim Director: National Institute for Theoretical and Computational Sciences (NITheCS), SU; and 'Fractional' Professor, School of Chemistry and Physics, UKZN; and Chair: DSI/NRF SARChI in Quantum Information Processing and Communication, UKZN
- **Prof Judy van Biljon** – Chair: DSI/NRF SARChI in ICT4D; and Research Professor: School of Computing, University of South Africa; and Chairperson: SA Chapter, International Network for Postgraduate Students in the area of ICT4D (IPID); and Chairperson: International Development Informatics Association; and *also in the Management category**
- **Prof Brenda D Wingfield** – Chair: DSI/NRF SARChI in Fungal Genomics; and Professor: Dept of Biochemistry, Genetics and Microbiology, Forestry and Agricultural Biotechnology Institute (FABI), UP

TW Kambule-NSTF Award: Researcher

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

- **Prof Ryan Blumenthal** – Senior Specialist Forensic Pathologist and Associate Professor: Department (Dept) of Forensic Medicine, University of Pretoria (UP); and *also in the Communications category**
- **Prof Novel N Chegou** – Professor: Division of Molecular Biology and Human Genetics, Dept of Biomedical Sciences, Faculty of Medicine and Health Sciences, Stellenbosch University (SU)
- **Prof Andrew Green** – Professor: Marine Geology, University of KwaZulu-Natal (UKZN); and Visiting Professor: University of Ulster, Northern Ireland; and *also in the Special Annual Theme category**
- **Prof Ajay K Mishra** – Group Leader: Research Area “Nanomaterials and Wastewater”; and Professor: Dept of Chemistry, Durban University of Technology (DUT); and *also in the Water Research Commission category**
- **Prof Marlo Möller** – Professor: Centre for Tuberculosis Research, South African Medical Research Council (SAMRC); and Department of Science and Innovation (DSI) / National Research Foundation (NRF) Centre of Excellence (CoE) for Biomedical Tuberculosis, Research Division, Molecular Biology and Human Genetics (MBHG), Dept of Biomedical Sciences, SU; and Associate Member: Centre for Bioinformatics and Computational Biology, SU
- **Prof Nosipho Moloto** – DSI/NRF/Nedbank Chair: South African Research Chair Initiative (SARChI) in Energy Materials, University of the Witwatersrand (Wits); and Research Professor: Inorganic Chemistry, Wits; and Deputy Director: African Research Universities Alliance, CoE in Materials, Energy and Nanotechnology, Wits; and *also in the Engineering Research Capacity Development category**
- **Prof Samuel O Oluwafemi** – Project Leader: Nanomaterials Synthesis and Applications Laboratory, Dept of Chemical Sciences (formerly Applied Chemistry), University of Johannesburg

[TW Kambule-NSTF Award: Emerging Researcher](#)

NEW Prize sponsor: South African Young Academy of Science (SAYAS)

- **Dr Kimberley (Kimi) Chapelle** – Postdoctoral Fellow: Department (Dept) of Science and Innovation (DSI) / National Research Foundation (NRF): GENUS Next Generation Palaeoscientist Grant, Evolutionary Studies Institute (Inst), University of the Witwatersrand (Wits)
- **Dr Terusha Chetty** – Specialist Clinician Scientist: HIV and Other Infectious Diseases Research Unit, South African Medical Research Council (SAMRC); and *also in the Clinician-Scientist category**
- **Dr Rachael Dangarembizi** – Senior (Sr) Lecturer: Dept of Human Biology/Neuroscience Inst, Faculty of Health Sciences, University of Cape Town (UCT)
- **Prof Usisipho Feleni** – Associate Professor and Thematic Area Leader: Applied Electrochemistry, Inst for Nanotechnology and Water Sustainability, University of South Africa (Unisa)
- **Dr Mubeen Goolam** – Lecturer: Human Biology, Dept of Human Biology, UCT
- **Dr Daniel W Hart** – Sr Research Fellow: Zoology and Entomology Dept, Faculty of Natural and Agricultural Sciences, University of Pretoria (UP)
- **Prof Shahida Moosa** – Head of Dept: Medical Genetics, Tygerberg Academic Hospital; and Associate Professor: Medical Genetics, Division of Molecular Biology and Human Genetics, Stellenbosch University (SU); and *also in and the Clinician-Scientist category**
- **Dr Edward C Netherlands** – Sr Lecturer: Dept of Zoology and Entomology, University of the Free State (UFS)

- **Dr Michael Pienaar** – Specialist Paediatrician: PICU Pelonomi Tertiary Hospital, Free State Department of Health; and Senior Lecturer: Dept of Paediatrics and Child Health, School of Clinical Medicine, Faculty of Health Sciences, UFS; and Co-Convenor: Ethics and Governance Group, Interdisciplinary Centre for Digital Futures, UFS; *and also in the Clinician-Scientist category*
- **Dr Daniel Ramotsoela** – Sr Lecturer: Dept of Electrical Engineering, UCT
- **Dr Fidele Tugizimana** – Lecturer and Research Scientist: Dept of Biochemistry, University of Johannesburg; and Specialist Scientist: International Research and Development Division, Omnia Nutriology, Omnia Group Ltd, South Africa
- **Dr Charl Verwey** – Sr Lecturer: Faculty of Health Sciences, Wits; and Head of Division: Paediatric Pulmonology, Wits; and Consultant Paediatric Pulmonologist, Chris Hani Baragwanath Academic Hospital, Johannesburg; *and also in the Clinician-Scientist category**

Management Award

- **Prof Isabelle Ansoorge** – Professor and Head of Department: Oceanography, University of Cape Town; Principal Investigator: SEAmester; *and also in the Special Annual Theme category**
- **Prof Paxie W Chirwa** – Chair and Director: Forest Postgraduate Programme, University of Pretoria
- **Dr Robin Drennan** – Director: Research Development, University of the Witwatersrand
- **Prof Judy van Biljon** – Chair: Department of Science and Innovation / National Research Foundation South African Research Chair Initiative in ICT4D; and Research Professor: School of Computing, University of South Africa; and Chairperson: SA Chapter, International Network for Postgraduate Students in the area of ICT4D (IPID); and Chairperson: International Development Informatics Association; *and also in the Lifetime category**

Engineering Research Capacity Development Award

Sponsor: [Eskom](#) since 2003

- **Prof Denis Kalumba** – Associate Professor: Geotechnical Engineering, University of Cape Town (UCT); and Director: Postgraduate Studies, Department of Civil Engineering, UCT; and Head: Geotechnical Division, UCT; and Director: Geotechnical Research Laboratory, UCT
- **Prof Soraya P Malinga** – Associate Professor and Co-Director: Joint Research Centre for Water, Environmental Science and Technology, University of Johannesburg
- **Prof Nosipho Moloto** – Chair: Department of Science and Innovation (DSI) / National Research Foundation (NRF) / Nedbank South African Research Chair Initiative (SARChI) in Energy Materials, University of the Witwatersrand (Wits); and Research Professor: Inorganic Chemistry, Wits; and Deputy Director: African Research Universities Alliance, Centre of Excellence in Materials, Energy and Nanotechnology, Wits; *and also in the Researcher category**
- **Prof Onesimo Mutanga** – Professor: Remote Sensing, University of KwaZulu-Natal (UKZN); and Chair: DSI/NRF SARChI in Land Use Planning and Management, UKZN; *and also in the Researcher category**

NSTF-Water Research Commission (WRC) Award

Sponsor: [WRC](#) since 2017

- **Prof John G Annandale** – Group Leader: Mine Water Irrigation Research Group, Department (Dept) of Plant and Soil Sciences, University of Pretoria (UP)

- **Prof Kirsty Carden** – Associate Professor: Dept of Civil Engineering, University of Cape Town (UCT); and Interim Director: Future Water Research Institute, UCT
- **Centre for Water Resources Research (CWRR), University of KwaZulu-Natal (UKZN)** – Prof Jeff Smithers, Director: CWRR; and Umgeni Water Chair: Water Resources Management, Innovation and Research, School of Engineering, College of Agriculture, Engineering and Science, UKZN
- **Prof Patricia Forbes** – Full Professor and Rand Water Chair: Dept of Chemistry, UP
- **Prof Ajay K Mishra** – Professor and Group Leader: Research Area “Nanomaterials and Wastewater”, Dept of Chemistry, Durban University of Technology; and *also in the Researcher category**
- **Prof Craig Sheridan** – Professor and Director: Centre in Water Research and Development; and Claude Leon Foundation Chair in Water Research, School of Geography, Archaeology and Environmental Studies, University of the Witwatersrand

NSTF-SAMRC Clinician-Scientist Award

NEW Sponsored by the **South African Medical Research Council (SAMRC)**

- **Dr Terusha Chetty** – Specialist Clinician Scientist: HIV and Other Infectious Diseases Research Unit, SAMRC; and *also in the Emerging Researcher category**
- **Prof Salome Maswime** – Obstetrician, Gynaecologist and Head: Global Surgery, Department (Dept) of Medicine, University of Cape Town
- **Prof Shahida Moosa** – Head: Medical Genetics, Tygerberg Academic Hospital; and Associate Professor: Medical Genetics, Division of Molecular Biology and Human Genetics, Stellenbosch University (SU); and *also in the Emerging Researcher category*
- **Dr Michael Pienaar** – Specialist Paediatrician: PICU Pelonomi Tertiary Hospital, Free State Department of Health; and Senior (Sr) Lecturer: Dept of Paediatrics and Child Health, School of Clinical Medicine, Faculty of Health Sciences, University of the Free State (UFS); and Co-Convenor: Ethics and Governance Group, Interdisciplinary Centre for Digital Futures, UFS; and *also in the Emerging Researcher category*
- **Dr Leigh van den Heuvel** – Specialist Psychiatrist: Tygerberg Hospital; and Sr Lecturer: Dept of Psychiatry, Faculty of Medicine and Health Sciences, SU
- **Dr Charl Verwey** – Sr Lecturer: Faculty of Health Sciences, University of the Witwatersrand (Wits); and Head of Division: Paediatric Pulmonology, Wits; and Consultant Paediatric Pulmonologist: Chris Hani Baragwanath Academic Hospital, Johannesburg; and *also in the Emerging Researcher category*

Green Economy Award

- **Mammal Research Institute (MRI), The Whale Unit** – Dr Els Vermeulen, Research Manager: Department (Dept) of Zoology and Entomology, University of Pretoria; and *also in the Special Annual Theme category*
- **Prof Andrew Thatcher** – Professor: Psychology Dept, School of Human and Community Development, University of the Witwatersrand
- **Prof Rachel Wynberg** – Chair: Department of Science and Innovation / National Research Foundation, South African Research Chair Initiative in Environmental and Social Dimensions of the Bio-economy; and Professor: Environmental and Geography Sciences, University of Cape Town

Data for Research Award

- **Prof Karen I Barnes** – Professor: Division of Clinical Pharmacology, Department (Dept) of Medicine, University of Cape Town (UCT); and Head:

Pharmacology Module, Worldwide Antimalarial Resistance Network; and Founding Director: UCT / South African Medical Research Council (SAMRC) Collaborating Centre for Optimising Antimalarial Therapy; and Honorary Visiting Research Fellow: Oxford University

- **Coronavirus COVID-19 (2019 – nCoV) Data Repository for South Africa (SA) – COVID19ZA Volunteers** – Prof Vukosi Marivate, Principal Investigator and Leader: Data Science for Social Impact Research Group, Dept of Computer Science, University of Pretoria (UP)
- **Freshwater Biodiversity Information System (FBIS) Team, Freshwater Research Centre (FRC) and Kartoza** – Dr Helen Dallas, Executive Director: FRC; and Team Leader: FBIS, *and also in the Non-Governmental Organisation category**
- **Inter-University Institute for Data Intensive Astronomy (IDIA)**, a partnership of UCT, University of the Western Cape (UWC), and UP, as well as the South African Radio Astronomy Observatory – Dr Russ Taylor, Director: IDIA; and Professor and Square Kilometre Array Research Chair, UCT and UWC

Innovation Award: Corporate Organisation – No Finalists

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

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

- **LignOrganic** – Mr Tshupo Manguole, Chief Executive Officer (CEO) and Founder, Johannesburg
- **Pegasus Universal Aerospace Team** – Dr Mohamed Reza Mia, Chairman and Founder, Johannesburg
- **Zambezi Analytics (Pty) Ltd** – Mr Tabani Mtombeni, Founder and CEO; and Prof Caliphs Zvinowanda

Communication Award

- **Prof Ryan Blumenthal** – Senior Specialist Forensic Pathologist and Associate Professor: Department of Forensic Medicine, University of Pretoria (UP); and *also in the Researcher category**
- **Consulting Engineers South Africa (CESA)** – Mr Chris Campbell, Chief Executive Officer (CEO), Johannesburg
- **Prof Roger Deane** – Director: University of the Witwatersrand (Wits) Centre for Astrophysics; and Wits Digital Dome Working Group, Chair: Department of Science and Innovation / National Research Foundation South African Research Chair Initiative in Radio Astronomy
- **Mrs Shakira Hoosain** – Campaign Strategist and Senior Copywriter: Research Matters, UP
- **Dr Martina Jordaan** – Head: Community Engagement Research and Postgraduate Studies, Mamelodi Campus, UP
- **Prof Pat Mfanelo Ntsohi** – CEO: Sci-Bono Discovery Centre, Johannesburg; *see also in the Non-Governmental Organisation category*
- **Prof Refilwe Nancy Phaswana-Mafuya** – Professor: Epidemiology and Public Health, Faculty of Health Sciences, University of Johannesburg (UJ); and Director: South African Medical Research Council / UJ Pan African Centre for Epidemics Research (PACER) Extramural Unit
- **South African Child Gauge** – Ms Lori Lake: Communication and Education Specialist, Children's Institute, University of Cape Town

Non-Governmental Organisation Award

- **Community Keepers** – Mr Gerrit Laning, Chief Executive Officer (CEO) and NGO Representative, Stellenbosch
- **Freshwater Research Centre (FRC)** – Dr Helen Dallas, Executive Director, Kirstenbosch, Cape Town; and *also in the Data for Research category**
- **Sci-Bono Discovery Centre** – CEO: Prof Pat Mfanelo Ntsohi; *see also the Communication category**

Special Annual Theme Award: Ocean Sciences for Sustainable Development

- **Prof Isabelle Ansoorge** – Professor and Head: Department (Dept) of Oceanography, University of Cape Town (UCT); and Principal Investigator: SEAmester; *and also in the Management category**
- **Prof Andrew Green** – Professor: Marine Geology, University of KwaZulu-Natal; and Visiting Professor: University of Ulster, Northern Ireland; *and also in the Researcher category**
- **Prof Juliet Hermes** – Professor: Dept of Oceanography, UCT; and Honorary Professor: Institute of Coastal and Marine Research, Nelson Mandela University; and Manager: Egagasini Node, South African Environmental Observation Network (SAEON); and Acting Manager: SA Polar Research Infrastructure, SAEON; *and also in the Lifetime category**
- **Mammal Research Institute (MRI), The Whale Unit** – Dr Els Vermeulen, Research Manager: Dept of Zoology and Entomology, University of Pretoria; *and also in the Green Economy category**

Adjudication: The selection process of finalists and winners for the NSTF-South32 Awards is made by an adjudication panel of independent judges. They represent [six different sectors](#) of the NSTF membership. This adjudication panel, in conjunction with the [sponsors and partners](#), review the nominations to select the finalists and winners each year. A panel of experts, appointed by the [NSTF Executive Committee](#), also assists the panel by reviewing and validating the final selections.

Honouring the Awards finalists and announcing the Awards winners

All finalists will be hosted at the Awards Gala Dinners in either Johannesburg or Cape Town. The announcement of the winners will take place at these events.

Attending the ‘Science Oscars’

The patron of the Awards, the Minister of Higher Education, Science and Innovation, Dr Blade Nzimande has been invited to preside over the presentation of awards taking place on **13 July 2023**. All finalists together with the sponsors and VIP guests will be invited to attend. The rest of the community will watch the live-streamed event via the [NSTF YouTube platform](#). Watch your mailbox for news about the [Awards Gala Event](#).

Media partners and advertising campaign

There are two media partners of the NSTF Awards to ensure national public recognition of the winners, as well as to facilitate the communication of science to the broader public. They are:

- [Business Report](#), carried by The Star, Pretoria News, Cape Times, and The Mercury newspapers
- [Mail & Guardian](#)

Both these newspapers carry [supplements](#) about the winners the day after the Awards Gala Events. Unique advertising opportunities are available for your brand. Contact [Mr Barnard Manne](#) to put you in contact with the media partners.

NSTF Youth programmes

One of the features that make these awards unique is that youth outreach is an integral part of the awards. Two NSTF [Youth](#) outreach programmes are run annually in conjunction with the NSTF Awards.

- The NSTF [Brilliants Programme](#) identifies and celebrates the top achievers in physical science and mathematics from the previous year's matric examinations, who are studying in STEM related courses. (STEM = science, technology, engineering and mathematics.) It exposes young people to the SET and innovation community. First year students (a young man and a woman from each province) are recognised as possible future leaders and innovators. The programme is sponsored this year by the Department of Science and Innovation.
- The NSTF [Share 'n Dare Programme](#) is an output of the NSTF Awards that profiles award winners as [role models](#). Award winners share their experience and knowledge with thousands of young people at science centres and events across the country. Since the COVID-19 lockdown in 2020, NSTF continued youth outreach by means of [career talk videos](#) that were circulated to schools and online to reach thousands of learners, as well as the general public. They encourage the youth to take up [careers in STEM](#). Thousands of South Africans are also reached through [community and national radio](#) talks. The programme is sponsored by South32.

Please forward this email to your colleagues, business contacts and all interested persons to promote the [who's who of SET and innovation in South Africa!](#)

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
- gathers stakeholders around [burning issues of national and global interest](#), across the public and private sectors, including matters of public policy
- includes a [network of professional societies in SET and STEM education](#) (STEM = science, technology, engineering and mathematics) - the [NSTF proSET membership sector](#).
- recognise, award and profile the outstanding contributions of individuals and groups to SET and innovation through the prestigious [NSTF Awards](#)
- runs and supports collaborative projects and [youth outreach](#), including recognition of top performance in mathematics and science, role modelling, bursary and STEM career information
- runs and supports the [STEMulator.org](#) which attracts youth and educators to Explore>Discover>Learn the world of STEM including careers. (Established by NSTF proSET)

For more information

www.nstf.org.za

E-mail: enquiries@nstf.org.za

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The NSTF has taken all practical measures to ensure that the material contained in this newsletter is correct.

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