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NSTF e-Newsletter

S.E.T. for socio-economic growth

The 2020 matric results and unpacking the implications of the surge towards e-learning

Message from the NSTF Executive Director, Ms Jansie Niehaus

The number of students that can do STEM courses at tertiary level is declining and the trend has to be turned around. The rapid move to e-learning might present an opportunity to make long-desired changes to teaching and learning. [Read the message.](#)



NSTF News

Twenty years of recognising youth excellence in physical science and mathematics

In 2001, a sponsorship of the Department of Arts, Culture, Science and Technology (that later became the Department of Science and Technology and more recently the Department of Science and Innovation) saw the NSTF Awards introduce the NSTF Education Recognition Programme (ERP). The Programme was initiated to recognise the top female learners from disadvantaged communities in all nine provinces with the highest marks in science and maths in their final year examinations. Together with the group, six educators, including two retired educators, as identified by the Sowetan/Telkom/Protec Teacher of the Year event, were also included. This was done with the hope to encourage greater achievements in science, engineering and technology (SET).

In 2002, the top female performers from four of the mathematics and science competitions – the Expo for Young Scientists, and Mathematics, Science and Technology Olympiads – were added to the Programme. 2003 saw the addition of the top schools in all nine provinces that formed part of the Dinaledi Project of the National Department of Education (DoE), giving better overview of achievements in education. Both the Eskom and Telkom Foundations joined as sponsors of the ERP, as well as BHP Billiton in 2007.

The Programme very quickly became a highlight of the annual [NSTF Awards](#), and is still a highlight of the NSTF Awards today.

Interest from the community sparked further acknowledgement in the form of complimentary subscriptions to *Quest* magazine, produced by the Academy of Science of South Africa (ASSAf), as well as the first tour to the facilities of Mintek and the National Zoological Gardens in Pretoria. Further opportunities presented in the form of bursaries, attendance of an astronomy weekend, and to top it all, attendance of the London Youth Science Forum, sponsored by the British Council in South Africa. BHP Billiton and the DoE continued to support the ERP from 2008 onwards. Achievers from Miquiz and the National Natural and Life Sciences Olympiad were added.

The activities of the ERP with a focus on girl learners continued until 2008, after which the programme was expanded to include the top male learners in 2009. The Technology and Human Resources for Industry (THRIP) programme joined to provide three undergraduates with bursaries.

In 2010 the ERP was renamed the '[Brilliant Programme](#) – for our future innovators'. The new name was initiated by the Chairperson of the NSTF Awards Publicity Committee, Ms Marie Ashpole, the Media and Outreach Officer at the South African Institution of Civil Engineering (SAICE). NSTF members recognise that the quality of school education, especially in STEM, is of great concern to all South Africans, in particular the business and SET and innovation communities. This was compounded by the economic recession, which resulted in insufficient research funding, impacting heavily on the education domain. Furthermore, movements in the political arena contributed to uncertainties at universities and schools which needed to understand and react to the new education curriculum.

The Brilliant Programme is now, more than ever, pressed to deliver on its mission to identify, recognise and nurture talent from the basic education sector and to expose these young '[Brilliant](#)' minds to the professional research environment through the NSTF Awards event. The programme is designed to [motivate talent](#) in order to realise full potential, encourage young talent to take up [careers in SET](#), assist them by providing career guidance, and seek support through [bursaries](#) to enable them to study further in SET fields.

From 2011, the Brilliant Programme focused on the top male and female matric learners, as well as the top schools with the continued support of the DoE and THRIP. BHP Billiton elevated their support of the NSTF Awards during this year to become the co-branding sponsor, resulting in the renaming of the Awards to the NSTF-BHP Billiton Awards.

From 2012 onwards, only the top achievers in the Grade 12 exams, both male and female learners are being recognised. The NSTF is the only organisation that recognises such learners, assessed solely on their physical science and mathematics marks in the NSC exams. At least 18 young people are selected, two from each province. The criteria are: that they must come from public schools, and be enrolled at public South African universities for STEM-related qualifications. From the top achievers that meet these criteria, those with the very top average of these two subjects are selected as the year's NSTF Brilliant students. Often these are students who obtained 100% in one or both subjects. Sometimes there is a tie, e.g. where two learners in the same province both had 100% in both. Then we include both of the students in the Brilliant programme.

From 2013 onwards, the Brilliant students are taken on a [tour of scientific interest](#), providing them with a broader perspective on SET and innovation. The aims are to inform them of work done in SET and innovation in South Africa, inspire them to continue with their STEM-related studies, and perhaps eventually to specialise in a field they were exposed to during the tour. Over the past years the following tours were arranged:

- Body Worlds exhibition at SciBono Discovery Centre, Johannesburg (2013)
- Maropeng (the Cradle of Humankind) and Sterkfontein Cave (2014)
- CSIR National Laser Centre (NLC) and Aerosud, Pretoria (2015)

- AGT Foods (agro-processing of grains and pulses) in Mogale City; and the CSIR Biomanufacturing Centre in Pretoria (2016)
- The first astronomy tour (2017) sponsored by the SARAO and SAAO: visits to the MeerKAT site, part of the Square Kilometre Array (SKA) radio telescope (Carnavon) and the South African Large Telescope (SALT) in Sutherland, as well as the Astronomical Observatory and Planetarium in Cape Town
- Second astronomy tour (2018): similar itinerary to the previous year
- Third astronomy tour (2019): Visits to SALT and Cape Town sites, as well as Naval Hill in Bloemfontein and the Hartebeesthoek Radio Astronomy Observatory (HartRAO) in North West province

In 2020 a Brilliants tour was not undertaken as a result of the Covid-19 pandemic.



2020/2021 NSTF-South32 Awards

Nominations

Completed nominations forms for this round of the prestigious NSTF-South32 Awards have streamed in. Look out for the newsletter announcing the nominees in April.

Special Annual Theme Award

The NSTF's theme for 2021 is **Creative Economy for Sustainable Development**, aligned with the United Nations' [International Year of Creative Economy for Sustainable Development](#).

If you have any questions, please email awards@nstf.org.za.

Share 'n Dare activities

The NSTF [Share 'n Dare programme](#) forms part of the [NSTF-South32 Awards](#). It provides a platform for [NSTF Award winners](#) to act as role models and

Discussion Forum news

Preparing for epidemics in South Africa

The first 2021 NSTF Discussion Forum, titled "[Preparing for epidemics in South Africa – human and animal](#)" was held in the form of a webinar from 25–26 February 2021. The event was hosted by the NSTF's [Science Councils and Statutory Bodies](#) sector. Visit the NSTF website to view the 15 informative [presentations](#) on issues around infectious diseases that have caused, or can cause, epidemics in South Africa.

Read more on this topic: The group of [scientific advisers to the European Commission](#) and the [European group on ethics](#) (to the commission, parliament and council of the European Union) have prepared briefing notes on pandemic preparedness. [Read](#) the 100-page document that has been published. The group is currently working on a further document.

ambassadors for science, engineering, technology (SET) and innovation. The winners share knowledge with youth and communities, inspiring young people to pursue studies and careers in SET and innovation.

A Share 'n Dare activity that took place in February:

- A virtual public lecture at [iThemba LABS](#) in the Western Cape. Speaker: Prof Richard Walls (2019/2020 TW Kambule-NSTF Award: Emerging Researcher). View the [video](#) of the event.

Internet of Things technologies and 5G connectivity roll-out

If you could not attend this webinar, do have a look at the [videos](#) from the event.

Plant health

Note that a [Discussion Forum](#) on the topic of Plant Health is in the pipeline for May or June 2021.

Send any queries on recent or previous NSTF Discussion Forums to enquiries@nstf.org.za.

Meet our 2020 NSTF-South32 Award winners

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

Sponsored by the National Intellectual Property Management Office (NIPMO) since 2019

Memeza Shout (Pty) Ltd and its Director, Ms Thulile Mthethwa, received this Award 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.

Memeza Shout is the first public alarm system endorsed by the SAPS and the government. It fills the gap where poorer communities need a low-tech low-cost technology that links communities together, is proactive with response networks (like the SAPS), gathers intelligent community-based crime data, and helps to reduce crime. The team is led by Mthethwa and Elmarie Pereira. [Read more](#).

Communication Award

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

For Professor Marnewick, the glaring absence of scientifically-supported evidence around health claims made about rooibos herbal tea and the misuse and misinterpretation of existing scientific outcomes set her course into the world of this popular beverage. She made it her goal to find out the health properties and science behind this tea and to then disseminate true facts and information to those who enjoy its flavour and its health benefits. [Read more](#).

Read about all the winners in the *Mail & Guardian* [special report](#) on the 2020 NSTF-South32 Awards. Mail & Guardian is a media sponsor of the NSTF Awards.

Today's research, tomorrow's innovation

Brilliant students an inspiration

The NSTF [Brilliant Program](#) recognises 18 first year students studying in the science, medicine and engineering fields. A young man and woman are chosen from each of the nine provinces. These students

Why become an NSTF member?

Why should your organisation belong to South Africa's umbrella body for science, engineering and technology (SET)

must have received top marks in mathematics and physical science in the National Senior Certificate Examinations (grade 12) of the previous year.

[Siphokazi Magagula](#) is one of the students recognised in the 2019/2020 Brilliants programme. She is studying mathematical sciences at the University of the Witwatersrand.

Listen to the [radio interview](#) on SAfm with Siphokazi on 31 January, and to the [podcast](#) of her interview on the Jet Set breakfast programme on the same radio station.

“Always strive to improve yourself and do better without competing with someone else.” – Siphokazi Magagula.

[Gary Allen](#), another 2019/2020 Brilliants student, is studying electrical engineering at Stellenbosch University.

“An achiever is not necessarily someone who attains the highest award or the best trophy, but someone who sets their mind to something they would like to accomplish and attains it after continuous effort.” Gary Allen

[Pieter TerreBlanche](#) is studying computer electronic engineering at North West University.

“I believe an achiever must be a hard worker and have determination, grit, perseverance, willpower, attitude and best of all, be humble.”

[Tharina Snyman](#) is studying veterinary science at the University of Pretoria. She attended school at Duineveld High School in the Northern Cape.

“Good research about the direction in which you want to go after school and the requirements that need to be met is vital.”

organisations? The NSTF represents more than 120 SET and innovation stakeholder organisations, of many different kinds including both public and private sectors. It is one of the few SET entities that has the ability to build bridges – between science and education, between engineering and science, and between parts of government and science.

The NSTF provides a unique platform for consultation and public policy engagement. It represents most of the disparate research and innovation structures and creates a collaborative multi-disciplinary space.

The NSTF plays a coordinating and unifying role, making it easier to get an overview of and navigate the SET landscape. There is strength in numbers and greater likelihood of being heard. There are common concerns, but various interests and points of view. There are no easy answers, but working together, more voices can be heard.

Other reasons to belong to the NSTF range from free attendance of NSTF [Discussion Forums](#) (mini-conferences) for employees of member organisations, supporting the recognition of outstanding contributions to SET and innovation through the [NSTF Awards](#), contributing to the monthly overview of SET news through the monthly [NSTF e-newsletter](#), and being part of meaningful SET [youth outreach](#).

If you are interested in becoming a member, visit the [Membership](#) section on the website for more information about the NSTF and request the membership application form from Mr Matome Mphela at enquiries@nstf.org.za.

S.E.T. for socio-economic growth

Bursaries available

Find the latest news on bursaries in science, engineering and technology (SET) in the NSTF [Bursary Directory](#). Currently available are:

- [FMCSA Ford Bursary](#) (Open)
- [Gauteng City Region Academy \(GCPA\) Bursary 2021](#) (Deadline: 31 March 2021)



proSET (Professionals in science, engineering and technology) is a sector of the NSTF representing about 40 professional and learned societies. This section shares news about [members](#) and introduces new members of the [proSET sector](#).

- **The Zoological Society of Southern Africa**

The Zoological Society of Southern Africa ([ZSSA](#)) welcomed three new members on the ZSSA Council. They are Dr Ute Schwaiboldt, Dr Melissa Boonzaaijer and Ms Mpho Malematja. Dr Schwaiboldt, an active researcher, lecturer and postgraduate supervisor at the University of the Witwatersrand, is currently working closely with Gauteng Department: Agriculture and Rural Development on the potential of biodiversity stewardship programmes for wildlife conservation in urban and peri-urban Gauteng. Dr Boonzaaijer-Davids is a marine ecologist and specialist taxonomist with a PhD in Biodiversity and Conservation Biology at the University of the Western Cape. Currently, she is an assistant curator (Marine Invertebrates) at the Iziko South African Museum. Ms Malematja has been recently appointed as a senior curator of birds at Ditsong Museum of Natural History. [Read more](#).

- **Consulting Engineers South Africa**

Consulting Engineers South Africa's ([CESA](#)) President, Sugen Pillay, presented his presidential message and theme for the year at a virtual event on 3 February, attended by media, CESA members, and infrastructure stakeholders from around South Africa. Pillay revealed his 2021 theme as 'Rebuilding with Purpose'. CESA's 2021 theme highlights importance of quality, integrity and accountability in South Africa's road to recovery. [Read more](#).

- **Institute of Information Technology Professionals**

The golden age of tech is coming, but scores of jobs are at risk, says [Sean Culey](#) business transformation expert, futurist and author of '[Transition Point: From Steam to the Singularity](#)'. Smart connected machines are set to put both blue collar and white collar workers out of jobs in large numbers, and this wave of change will force paradigm shifts in education, work and society as a whole. He was speaking during a webinar hosted by the Institute of Information Technology Professionals South Africa ([IITPSA](#)) special interest group on AI and Robotics and the special interest group's chairperson, Johan Steyn. [Read more](#).



SET-related policies currently open for public comment

Policies open for comment allow the science, engineering and technology (SET) community to keep track of the changing regulation environment.

- [Council for Medical Schemes Levies Act: Levies on medical schemes](#) (Comment by 12 March 2021)
- [Tourism Act: National norms and standards for the safe operations of tourism sector in the context of COVID-19 and beyond: Draft](#) (Comment by 21 March 2021)
- [Agricultural Standards Act: Leaf Services: Inspection procedures and inspection fees for grains and grain products](#) (Comment by 24 March 2021)
- [Immigration Act: Draft Critical Skills List](#) (Comment by 31 March 2021)
- [Plant Breeders' Rights Act: Receipt of applications for plant breeders' rights](#) (Comment by 23 April 2021)
- [Integrated Crime and Violence Prevention Strategy](#) (Comments invited)

SET-related policy news

Some articles included in the section below are opinion pieces. The opinions expressed in these articles do not necessarily reflect the views of the NSTF Executive Committee, Directors, Secretariat or Members.

Energy

- [Support for President's commitment to renewable power](#) (energize.co.za)
- [Ramaphosa announces new electricity generation plan](#) (eNCA)
- [Electricity from Inga 3 "unaffordable"](#) (energize.co.za)
- [Government urged to delay procurement of new nuclear power generation until after 2030](#) (bizcommunity.com)
- [Issuing of SA's first EPC is an energy efficiency milestone achievement](#) (energize.co.za)

Environment

- [Vaal River polluted beyond acceptable standards, SAHRC finds](#) (3smedia.evlink9.net)
- [Green Business Support Services Directory offers support to green entrepreneurs and SMMEs](#) (bizcommunity.com)

Agriculture

- [SONA a mixed bag on agriculture](#) (agbiz.co.za)
- [Agbiz warns that the sharp increase in the national minimum wage will negatively affect various labour-intensive subsectors of agriculture](#) (agbiz.co.za)
- [Western Cape confirms swine fever outbreak](#) (sanews.gov.za)
- [Agbiz participates in launch of the Global Food Security Index](#) (agbiz.co.za)

- [SA set to have its largest summer grain and oilseed harvest on record in 2020/21 production season](#) (agbiz.co.za)
- [SA's standing as a food-secure country deteriorated 'sharply'](#) (news24.com)

Technology and the 4th Industrial Revolution

- [Smart cities concept is taking off in Africa](#) (engineerit.co.za)
- [Telkom vs ICASA and everyone else – The battle for 5G spectrum](#) (mybroadband.co.za)
- [Unpacking complexities facing African girls in the technology sector](#) (iafrican.com)

Space Science and Astronomy

- [Cabinet greenlights NASA/SANSA study for deep-space ground station](#) (sansa.org.za)

Education

- [What Does Equal Access to Education Mean in the Digital Age?](#) (itnewsafrika.com)
- [Techno Girl empowers young girls to become scientists](#) (social-tv.co.za)
- [NGOs warn latest budget will have bad outcomes for education](#) (bizcommunity.com)
- [Coding, robotics curriculum pilot to finally get going in 2021](#) (itweb.co.za)

Infrastructure

- [New agency set up to oversee water supply countrywide](#) (iol.co.za)
- [SA government construction tenders and contracts still don't acknowledge Covid-19 risks](#) (infrastructurenews.co.za)
- [Transform SA's water, energy and transport assets in 2021](#) (infrastructurenews.co.za)

Medicine and Health

- [Virtual interview with the Director-General of the Department of Science and Innovation regarding the management of the COVID-19 pandemic](#)
- [To Increase Confidence in COVID-19 Vaccines, Decision-Makers Need to Showcase Public Support, Leverage Endorsements, Focus on Hesitant Individuals, and Engage Communities](#) (nationalacademies.org)
- [Cabinet welcomes progress made by scientists, researchers](#) (sanews.gov.za)



The events posted below are correct as far as we could establish at the time of preparing this newsletter. Please check the relative websites for changes to dates and venues.

- ASSAf: [Civil Society Organisations in conversation with science: Synergies aimed at addressing developmental challenges for the societies we serve:](#) Zoom event, 15 March 2021, 11:00 – 12:30

- [ASSAf Science for Society Week](#): Various Zoom events, 15 – 19 March 2021
- [Citation Programme in Applied Geostatistics](#): Live online lecturing, Johannesburg, 15-19 March and 12-16 April 2021
- [Second International Congress of Biological Control](#) (ICBC2): Virtual congress 26-30 April 2021
- [SPACEOPS 2021](#): 16th International Conference on Space Operations. Virtual Edition, 3-5 May 2021.
- [African Utility Week and POWERGEN Africa](#), live event in Cape Town, 11-13 May 2021
- [ST-Africa2021](#), the sixteenth in an annual series of Ministerial Level Technology Research and Innovation Conferences hosted by Africa Governments: Virtual conference, 10–14 May 2021. View the [Advance Programme](#). Presenter registration is available up to 12 March and Early bird delegate registration up to 31 March. Register [here](#).
- [10th SA AIDS Conference](#): Ending AIDS & Global Pandemics: Virtual event, 8-11 June 2021. The abstract submission closing date has been extended and will close on 12 March 2021.
- [22nd Biennial ESSA Congress](#) of the Entomological Society of Southern Africa: Tshipise, Limpopo Province, 28 June - 1 July 2021
- [Grassland Society of Southern Africa Congress 56](#), Oudtshoorn 26-30 July 2021
- [AI Expo Africa 2021](#) will run as a 3-day online live event 7-9 September 2021, followed by 30-day on-demand show. Click [here](#) for a free ticket and to register.
- [SAAFoST 24th Biennial Virtual Congress](#): 20-22 September 2021. [Click here to register](#)
- The [Bio2021 Conference](#) at Spier Wine Estate has been postponed to 26-29 September 2021
- Institute of Waste Management of Southern Africa (IWMSA) [Biennial Seminar and Exhibition “Landfill and Waste Treatment 2021”](#), Durban, 3-5 November 2021
- [2021 IMESA Conference](#): Cape Town, 17-19 November 2021
- [23rd International Congress of Zoology](#): Cape Town, 21-25 November 2021
- The 7th [World Conference of Research Integrity](#) Cape Town, has been postponed to 29 May – 1 June 2022



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Science Councils and Statutory Organisations

- [Sampling wastewater for presence of COVID viable in South Africa](#) (wrcwebsite)
- [SANSa satellite data boosts government’s response to COVID-19](#) (sansa.org.za)

- [2020-2021 Global Cleantech Innovation Programme Top 10 Finalists](#) (tia.org.za)
- [Public and Private Sector Collaboration Boosts Vaccination](#) (samrc.ac.za)
- [South Africa's photonics prototyping facility to be unveiled at the CSIR Pretoria](#) (csir.co.za)

Space Science and Astronomy

- [The Square Kilometre Array Observatory has been launched](#) (engineeringnews.co.za)
- [SANSA keeping an eye on the South Atlantic Anomaly splitting in two](#) (sansa.org.za)
- [The world's largest radio telescope should open its skies to all](#) (nature.com)

Palaeontology and Archaeology

- [New technology allows scientists first glimpse of intricate details of Little Foot's life](#) (wits.ac.za)
- [The Archaeologists Recreating the Sounds of the Stone Age](#) (atlasobscura.com)

Creative Economy

- [Outdoor furniture made from recycled plastic raises awareness of ocean pollution](#) (msn.com)

Zoology and Botany

- [First estimate of Namibia's dolphin populations](#) (sun.ac.za)
- [Fencing-in of Botswana elephants could explain why 350 elephants died in one area, reveals UP-led study](#) (up.ac.za)
- [Ground-breaking study reveals colonies of mole-rats communicate with each other in their own dialect](#) (up.ac.za)

Medicine and health

- [SA's Covid-19 Vaccine Rollout: Your questions answered](#) (Daily Maverick webinar with professors Glenda Gray and Shabir Madhi)
- [Study finds that not enough South Africans are prepared to be vaccinated against Covid-19](#) (bizcommunity.com)
- [Malnutrition: 'a slow violence against our children'](#) (uct.ac.za)
- [Vaccine misinformation: What to do when it's coming from leaders](#) (bhekisisa.org)
- [Weighing up COVID-19 vaccines](#) (uct.ac.za)
- [How COVID vaccines get approved: 4 things you need to know](#) (bhekisisa.org)
- [Big Lessons From The Rapid Development Of COVID Vaccines](#) (issuesinsights.com)
- [Hindsight is 2020: Three lessons from our second wave](#) (bhekisisa.org)
- [UCT scientists to start Phase 1 clinical trial of COVID-19 vaccine candidate](#) (uct.ac.za)
- [Environmental degradation threat to health, UN says](#) (scidev.net)
- [Fine-tuning TB technology](#) (uct.ac.za)
- [UCT surgeon performs holographic surgery](#) (uct.ac.za)
- [Targeted spraying to prevent malaria in low transmission setting halves cost of current practice](#) (wits.ac.za)

Epidemics – human and animal

- [Mfuleni pig farmers hit hard by African Swine Fever outbreak](#) (msn.com)

Environment

- [Successful fishing line bin project expands its footprint](http://infrastructurenews.co.za) (infrastructurenews.co.za)
- [South African enterprise diverts millions of kg of food waste from landfill](http://infrastructurenews.co.za) (infrastructurenews.co.za)
- [Why using rare metals to clean up the planet is no cheap fix](http://newscientist.com) (newscientist.com)

Energy

- [Report back: Green Hydrogen opportunities for SA webinar](http://energize.co.za) (energize.co.za)
- [Johannesburg's first gas-fired power plants](http://energize.co.za) (energize.co.za)
- [Africa's energy sector steering towards renewables](http://engineerit.co.za) (engineerit.co.za)
- [Koeberg deterioration: A challenge proposed](http://energize.co.za) (energize.co.za)
- [Energy transformation in Southern Africa gets a boost](http://energize.co.za) (energize.co.za)

Climate change

- [Climate change: A cloud of uncertainty over mining](http://3S Media - Water & Sanitation) (3S Media - Water & Sanitation)

Infrastructure

- [How the construction industry can meet decarbonization targets](http://infrastructurenews.co.za) (infrastructurenews.co.za)
- [Concor wins multi-million rand MeerKAT/SKA telescope construction project](http://infrastructurenews.co.za) (infrastructurenews.co.za)

Agriculture

- [Why Africa's Youth Needs Access to Agricultural Knowledge and Tools](http://itnewsafrica.com) (itnewsafrica.com)
- [Flying autonomous robot can spot and pick ripe fruit](http://inceptivemind.com) (inceptivemind.com)
- [NWU study: how indigenous fruit trees can benefit food security](http://nwu.ac.za) (nwu.ac.za)

Indigenous Knowledge Systems

- [Winning PhD highlights African indigenous knowledge systems](http://uct.ac.za) (uct.ac.za)
- [Miracles and medicine: How COVID-19 has been changing the traditional remedies game](http://bhekisisa.org) (bhekisisa.org)
- [Collaboration between CSIR and DSI yields impactful results for Six Traditional Health Practitioners](http://csir.co.za) (csir.co.za)

Technology and the 4th Industrial Revolution

- [World's first robot ARTIST is set to exhibit series of self-portraits](http://msn.com) (msn.com)
- [The contact centre is the ideal 4IR training ground](http://itweb.africa) (itweb.africa)
- [Is Artificial Intelligence relevant for all industries?](http://engineerit.co.za) (engineerit.co.za)
- ['Zoom fatigue' takes hold as video-conferencing novelty wears off](http://itweb.co.za) (itweb.co.za)
- [Geophysicists develop innovative seismic technologies](http://wits.ac.za) (wits.ac.za)

Opportunities

- 2021 Japan International Award for Young Agricultural Researchers
Application deadline: 22 March 2021.
- Acquire cutting-edge Scicomm & Engagement expertise with Stellenbosch online course: 14 June to 30 July 2021. The course will be followed by a practical project that will wrap up by the end of August 2021. Successful participation requires about 2–3 hours per week, as well as attendance of one 60-minute online discussion per week. The enrolment fee: R9 000 per person.

Apply on or before 21 May 2021. Contact Rolene Langford at rlm@sun.ac.za for assistance.

- AstroArt Competition: As part of its 200-year anniversary celebrations the [South African Astronomical Observatory](#) invites all foundation phase learners, grades R to 3, to enter their AstroArt competition. Deadline: 31 May 2021. [Read more.](#)
- Applications for the [2022-2023 Fulbright Foreign Student Program](#) are now open and, due to the global COVID-19 pandemic and revised academic calendar, will close on May 14, 2021. Fulbright is a competitive scholarship program that offers South African citizens and permanent residents the opportunity to complete a Master's or Doctoral degree at any accredited tertiary institution in the United States.
- The **Council of Academies of Engineering and Technological Societies** (CAETS) of which the SA Academy of Engineering is a member, has established a Communications Committee to find ways of helping the member academies improve the communication of policy, educational initiatives and the importance of engineering and technological sciences in society. Two annual CAETS Communication Prizes are awarded for the best short videos of preferably less than 5 minutes, explaining the societal importance of technological breakthroughs and engineering successes. South African entries will be judged by a national panel and the winners will be announced on 29 June 2021. The winning entries will then be submitted to CAETS for the international competition. Entries have to be submitted by 31 May 2021. [Read more.](#)
- **The Long-term Europe-Africa Partnership on Renewable Energy (LEAP-RE) programme** invites participants to submit collaborative research and innovation projects proposals on renewable energy. Closing date: 1 April 2021. [Read more.](#)
- **Nature Careers funding opportunities:** If you're looking for fellowships, research funding or scholarships, a new website from Nature Careers [offers thousands of funding opportunities](#). You can also find tips on how to write a winning grant application, find a funded internship in industry, bounce back from rejection, and lots more — [all for free](#).



- [UP's Maharaj appointed first African Dean to chair GEDC](#) (up.ac.za) Prof Sunil Dutt Maharaj, Dean of the Faculty of Engineering at the University of Pretoria, was the male recipient of the NSTF's Eskom-sponsored 'Researcher, for Research Capacity Development over the last 5-10 years' Award in 2007.
- [International Day of Women and Girls in Science honors Two SA women](#) (social-tv.co.za)
- [Humble but determined' A tribute to award-winning SA virologist Dr Graeme Jacobs](#) (iol.co.za). Dr Jacobs is registered and will be considered for nomination for a 2021 NSTF-South32 Award.
- [In memoriam: DR Stuart Saunders](#) (uct.ac.za)

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 bursaries page provides information on bursaries and bursary providers for science, engineering and related studies.

Disclaimer

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.

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For more information

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