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# NSTF e-Newsletter

*S.E.T. for socio-economic growth*

## We need scientists of the calibre of the NSTF-South32 Awardees

*Message from the NSTF Executive Director, Ms Jansie Niehaus*

The world needs scientists to study and analyse the enormous complexity of a globalised world. The COVID-19 pandemic has placed the focus on medical science, but all other fields of research remain of great value, as they address a myriad of problems to be solved. [Read the message.](#)



## NSTF News

### 25 years of serving the science, engineering, technology and innovation community in SA

The [National Science and Technology Forum \(NSTF\)](#) is celebrating 25 years of its existence this year. This [stakeholder body](#) draws together more than 100 organisations, councils and institutions involved in science, engineering, technology (SET) and innovation in South Africa. Its core vision is a transformed society where SET contributes to improving lives, the demographic profile of SET professionals is reflective of that of SA's population, and where the education system functions properly, especially in SET subjects.

### NSTF eNews, policy news and policy briefs – a service to the community

The [NSTF eNews](#) is distributed monthly to a database of more than 10 000 contacts. It serves the broader community and not only NSTF members. Each edition includes an [opinion piece](#) by the Executive Director (ED), a list of Government policies open for public comment, SET-related policy developments, and SET events coming up. This allows all SET stakeholders, and anyone concerned about public SET-related policy, to be well informed and to give feedback on specific issues. The intention is to generate dialogue, and contribute to SET and innovation policy debates.

The largest section of the NSTF eNews offers a comprehensive monthly overview of South African SET-related news. (See here below). The proSET (professional bodies and learned societies in SET) news section is where the news of professional bodies that are members of the NSTF can be found (see below). Send us your news!

The NSTF has unpacked the National Development Plan (NDP) from a SET perspective. The write-ups on all 15 chapters were published in the eNews during 2017 to 2019, and can now be accessed as a complete [publication](#) on the NSTF website.

### *S.E.T. for socio-economic growth*

## **NSTF 2020 AGM**

NSTF members are invited to take part in the 2020 NSTF Annual General Meeting that will take place in the form of a digital meeting on 13 November.

There will be no seminar as part of this meeting. More details will follow.



## **Read all about the 2019/2020 NSTF-South32 Awards Gala Event**

### **Awards Gala Event**

The 2020 NSTF-South32 Awards gala event was presented online for the first time ever. It took place on Thursday, 30 July 2020. The winners' outstanding contributions to science, engineering and technology (SET) and innovation were awarded and celebrated live by about 500 viewers. Click [here](#) to watch the proceedings. The theme for the evening was Plant Health in recognition of the United Nations' declaration of 2020 as the '[International Year of Plant Health](#)'. Find the full list of winners [here](#).

### **Awards winners**

The Lifetime Award went to Prof Michèle Ramsay, Professor: Human Genetics;

## **Share 'n Dare programme**

The NSTF [Share 'n Dare programme](#) provides a platform for [NSTF-South32 Award winners](#) to act as role models and ambassadors of science, engineering, technology (SET) and innovation. The winners share knowledge with learners and communities, inspiring young people to follow careers in SET and innovation. The programme is sponsored by the [Fuchs Foundation](#).

This year the Award winners are not able to travel to take their messages to the various audiences because of COVID-19 travel restrictions. However, the NSTF is still managing to reach out to learners in far-flung areas of our country with information on careers in SET and innovation, thanks to a collaboration with [Nzalo Careers](#).

Nzalo Careers is a non-profit company that

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). She received the Award for her pioneering genomic medicine approaches in Africa and leading the transcontinental study on factors that contribute to African diseases.

This year the [Special Annual Theme Award](#) was made for an outstanding contribution to SET and innovation through research and development, and innovation in Plant Health. The winner was Prof Michael Wingfield, Professor: Forestry and Agricultural Biotechnology Institute; and Adviser to the Executive, University of Pretoria. He received the prize for being globally recognised as a SA plant pathologist and 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.

Find out all about all [the winners](#) on our website. The [Mail & Guardian](#) special supplement tells more about these remarkable people and their research.

You can also read about the Awards finalists and more in the NSTF's [Who's who in science, engineering, technology and innovation](#) publication.

## Discussion Forums to be resumed in second semester

The NSTF [Discussion Forums](#) will resume in the form of webinars in the coming months. The following are in the pipeline for 2020:

- Discussion Forum on **Plant Health** will take place in September
- A proSET/NSTF Discussion Forum on **5G connectivity** is scheduled for October
- A Discussion Forum in partnership with the Science Councils and Statutory Bodies on **Outbreak Preparedness** in December.

## Brilliants Programme recognises top matriculants

The NSTF [Brilliants Programme](#) annually 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 top performers in physical science and mathematics in the National Senior Certificate Examinations (matric) of the previous year are identified by the Provincial Education Departments, and selected by the NSTF.

specialises in career and leadership development for learners in disadvantaged areas.

Since the Awards winners could not attend the events, the following inspiring recorded videos were shared with the learners:

- [Dr Gerrie Booysen](#), Director, Centre for Rapid Prototyping and Manufacturing, Central University of Technology, Free State, winner of the Innovation Award: Corporate Organisation.
- [Dr Hlumani Ndlovu](#), Senior Lecturer, Department of Integrative Biomedical Sciences, University of Cape Town, winner of the TW Kambule-NSTF Award: Emerging Researcher.

Please share these talks with the youth and educators and in doing so, help us to inspire young people to follow careers in SET and innovation.

### STEMulator.org

'STEM-seeds', USB memory sticks loaded with the [STEMulator.org](#) are being distributed to schools around South Africa as part of the Nzalo careers roadshow. The STEMulator will ignite a learner's interest in science, engineering and technology through its interactive and informative animated visual content.

It will grow as you – as SET stakeholders - become involved and/or contribute content. Contact us if you are interested. [Read more](#).

19 Brilliants students were identified and recognised in the Awards Gala Event this year. Listen to the Brilliants section of the [Awards Gala Event](#) as announced by the NSTF Executive Director, Ms Jansie Niehaus. Meet them in the photo below.

The NSTF exposes 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. Normally the Brilliants students are treated to a tour, a stay at Emperors Palace, attendance of the Awards Gala Dinner, and a speakers' programme. This year none of these was possible, but we hope to arrange activities for next year and include the 2020 Brilliants students then.

Read more about the Brilliants Programme and [this year's Brilliants students](#).



### **NSTF welcomes a new member**

The NSTF welcomes a new member:

- [The Independent Institute of Education \(Pty\) Ltd](#) – The IIE (Higher Education Sector)

If you are interested in becoming a member, visit the [Membership](#) section on the website for more information about the NSTF and [apply online](#).

### **Bursaries available**

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

- [Accenture](#) (Deadline 15 August 2020)
- [AECOM](#) (Deadline 31 August 2020)
- [Aurecon](#) (Deadline 31 August 2020)
- [IDC Bursary](#) (Deadline 31 August 2020)

### **The STEMulator.org now live**

The [STEMulator](#) – a virtual XplorITory, rich in visuals and animations, low on text – is now LIVE and is ready to host your content. An initiative of [NSTF/proSET](#) (Professionals in Science, Engineering and Technology) to introduce youngsters to the fascinating world of science, technology, engineering and mathematics (STEM) and stimulate their natural curiosity. Visit [the website](#), click on the virtual landscape and explore....:

- [car](#) (engine, brakes, exhaust, etc.)
- [human](#) (skeleton, muscles, heart, etc.)
- [agriculture](#) (soils, insects, crops, etc.)
- [mountain](#) (weather, clouds, sun, etc.)
- [hospital](#) (ICU, surgery, MRI, etc.)
- [house](#) (wiring, plumbing, appliances, etc.)
- [energy](#) (coal, nuclear, wind, solar, etc.)

- [South African Radio Astronomy Observatory Bursaries](#) (Deadline: 31 August 2020)
- [SANSA](#) (Deadline 15 September 2020)
- [Amazon Recruitment Bursary](#) (Deadline 30 September 2020)
- [Investec CSI Bursary](#) (Deadline: 30 September 2020)
- [Takealot.com Bursary Programme](#) (Deadline: 30 September 2020)
- [Hulamin](#) (Deadline: 30 October 2020)
- [PSG](#) (31 December 2020)
- [FMCSA Ford Bursary](#) (Open)

Visit the directory for information on bursaries, SET [career](#) guidance and inspirational [role models](#).

If your company/institution provides bursaries to undergraduate students in SET-related courses, please send us information on these bursaries to [enquiries@nstf.org.za](mailto:enquiries@nstf.org.za) for inclusion in the directory.

The Bursary Directory is sponsored by the [Carl and Emily Fuchs Foundation](#).

**SET for life!**



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 of the [proSET sector](#).

- **Consulting Engineers South Africa (CESA)**

According to [Consulting Engineers South Africa](#) (CESA) CEO, Chris Campbell, CESA has stepped up to the plate in recent years to assist and advise municipalities on sounder and more effective project procurement, planning and implementation processes. [Read more.](#)

- **Geoinformation Society of South Africa (GISSA)**

Last year saw the closing of EE Publishers and with that the end of *PositionIT*, the industry journal for Geoinformation Science. A new platform, [Novum Intel](#) will hopefully fill this niche. Novum Intel is an intelligently-designed, comprehensive news and information service platform for geospatial and location intelligence professionals across Africa with completely free and open access to [GISSA](#) members. [Read more.](#)

- [aeroplane](#) (wings, cockpit, fuselage, etc.)

The prototype is complete and in the public domain; another component of e-learning. **Now it's your turn.** We're hungry for more **content**. You supply it, we'll add it. The framework is there, ready to grow. The landscape can host any scientific and technical **content**. The more graphic and animated, the better.

Then we need you to spread the news, share, and put us in **contact** with STEM and education professionals. The coordinator and driver of the project is Richard Gundersen of the NSTF proSET committee

Get in touch at [richard@stemulator.org](mailto:richard@stemulator.org) to discuss your ideas with Richard or contribute material. And if you want to **contribute** we have all the certifications for tax and BEE credits.

*Explore, discover, learn*

- **SA Institute of Electrical Engineers (SAIEE)**

Sy Gourrah, a senior executive in ACTOM's Transmission and Distribution division, was inaugurated as President of the [SA Institute of Electrical Engineers](#) (SAIEE) for 2020 in Johannesburg at the end of March. The subject of her inaugural speech was on the fifth industrial revolution. [Read more](#) (energize.co.za).



### 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.

- [National Environmental Management Act: Air Quality Act: Second Generation Air Quality Management Plan for Vaal Triangle Airshed Priority Area](#) (Comment by 11 August 2020)
- [National Environmental Management Act: Procedure in applying for environmental authorisation for large scale wind and solar photovoltaic energy development activities when in geographical areas of strategic importance: Amendment](#) (Comment by 17 August 2020)
- [National Environmental Management Act: Intention to identify 7 geographical areas of strategic importance when planning for development of electricity transmission and distribution infrastructure](#) (Comment by 17 August 2020)
- [National Environmental Management Act: Intention to identify geographical areas which are of strategic importance when planning gas transmission pipeline infrastructure](#) (Comment by 17 August 2020)
- [Agricultural Product Standards Act: Regulations: Canned and pickled vegetables](#) (Comment by 17 August 2020)
- [Electronic Communications Act: Proposed policy and policy direction on rapid deployment of electronic communications networks and facilities](#) (Comment by 2 September 2020)
- [Antarctic Treaties Act: Antarctic and Southern Ocean Strategy](#) (Comment by 21 September 2020)
- [National Nuclear Regulator Act: Draft Regulations on Long Term Operation of Nuclear Installations](#) (Comment by 18 August 2020)
- The Department of Mineral Resources and Energy (DMRE) has released the Discussion Paper on National Decommissioning Policy for Nuclear Facilities for public comments. The Discussion Paper is published on the [DMRE website](#). (Comment by: 18 August 2020). Comments and submissions may be lodged by e-mail, by post or hand delivered, directed to: The Director: Nuclear Safety, Liabilities, and Emergency Management; email: [nucleardecomm@dmre.gov.za](mailto:nucleardecomm@dmre.gov.za); post: Private Bag X96, Pretoria 0001; hand delivery: 192 Visagie Street, Pretoria 0001
- [Pharmacy Act: Regulations: Pharmacy Education and Training: Amendment](#) (Comment by 12 September 2020)
- [Council for the Built Environment Act: Scope of work for categories of registration for professions regulated by Engineering Council of South Africa](#) (Not for comment)

## 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.

### Department of Science and Innovation

- [DSI Newsletter 2019/2020](#) (dst.gov.za)

### Science, race and ethics

- [The stubborn stickiness of race science in SA in the 21<sup>st</sup> century](#) (dailymaverick.co.za)

### Water use

- [Department of Water and Sanitation tightens its grip on water polluters](#) (infrastructurenews.co.za)
- [Safeguard waterways and reap the benefits](#) (infrastructurenews.co.za)
- [Eradication of bucket toilets still a priority for water department](#) (infrastructurenews.co.za)

### Innovation

- [The pace and direction of innovation is critical to South Africa's economic recovery](#) (dailymaverick.co.za)
- [Minister Nzimande's remarks at the first EU-AU Research and Innovation Ministers' Meeting on 16 July 2020](#) (dst.gov.za)

### Energy

- [Immediate solution for load shedding](#) (energize.co.za)
- [Exploring the complexities of re-financing IPPs](#) (energize.co.za)
- [Wind industry engages with minister to forge positive plans](#) (energize.co.za)
- [Look out SA! Electricity tariffs set to soar](#) (energize.co.za)

### Environment

- [Commonwealth academies statement on climate change, biodiversity and sustainable energy](#) (science.org.au)
- [South African Townships fighting the flood of waste](#) (DW Waste)
- [Electronic waste is world's fastest-growing domestic waste stream](#) (infrastructurenews.co.za)

### Agriculture

- [Finding the key to agricultural growth in SA](#) (dailymaverick.co.za)

### 4<sup>th</sup> Industrial Revolution and technology

- [Address by the Minister of Higher Education, Science and Innovation, Dr Blade Nzimande on the occasion of the 4IR Virtual Conference organised by Fuze Business Initiative](#) (dst.gov.za)
- [Internet shutdowns in Africa threaten democracy and development](#) (stuff.co.za)

### Education

- [The importance of reliable connectivity and interactive learning technology in a Covid-19 world](#) (iol.co.za)
- [Limpopo schools face difficult challenges](#) (infrastructurenews.co.za)
- [Project-based learning to encourage parental involvement in promoting indigenous technology in schools](#) (tandfonline.com)
- [COVID-19 school closures in South Africa and their impact on children](#) (theconversation.com)

- [No child's play — Will social distancing work on playgrounds?](http://bhekisisa.org) (bhekisisa.org)

#### Infrastructure

- [Rapid deployment of communication, a disturbing trend](http://engineerit.co.za) (engineerit.co.za)

#### Medicine and Health

- [COVID-19 and Disabilities: Inclusive Disaster Planning Is Crucial for Vulnerable Populations](http://nationalacademies.org) (nationalacademies.org)
- [Science and innovation dept to research traditional medicine for Covid-19 fight](http://news24.com) (news24.com)
- ['Equitable access' the main concern in race for Covid-19 vaccine](http://dailymaverick.co.za) (dailymaverick.co.za)
- [World Health Organization "very concerned" that Covid-19 cases may accelerate in Africa](http://edition.cnn.com) (edition.cnn.com)
- [South Africa is failing on COVID-19 because its leaders want to emulate the First World](http://theconversation.com) (theconversation.com)



*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.*

- [Promoting health in a pandemic. What we can learn from COVID-19](#): Webinar, 14:00 – 16:00, 7 August 2020
- [Bio Africa Convention](#): Digital, 24-26 August
- [3rd African Symposium on Mycotoxicology](#): Stellenbosch, 6-9 September 2020
- [SA Innovation Summit](#): This will be a virtual edition, 30 September – 1 October 2020
- [14th International Conference on CFD In the Oil & Gas, Metallurgical and Process Industries](#): Trondheim, Norway 12-14 October 2020
- SAAO Virtual Symposium: [Beyond 200 Years of Astronomy](#): 20-22 October 2020
- [IMESA Conference](#): Cape Town, 28-30 October 2020
- [The Water Show Africa](#): Johannesburg, 4-5 November 2020
- [World Engineering Education Forum - Global Engineering Deans Council Conference \(WEEF-GEDC\)](#): Engineering for the Sustainable Development Goals, Cape Town, 15-20 November 2020
- [Water Institute of South Africa 2020 Conference](#): Johannesburg, 5-9 December 2020
- [Manufacturing Indaba](#): Midrand, 9-10 December 2020
- [WasteCon2020](#): Johannesburg, 9-11 February 2021
- [Inaugural South African Clinician Scientists Conference](#): Cape Town, 25-26 February 2021
- [Agbiz Congress 2020](#): Building resilient and sustainable agri-food ecosystems: Sun City, 7-9 April 2021
- [Second International Congress of Biological Control \(ICBC2\)](#): Davos, Switzerland, 26-30 April 2021
- [16<sup>th</sup> International Conference on Space Operations](#): Cape Town 3-7 May 2021
- The 7<sup>th</sup> [World Conference of Research Integrity](#) is to be hosted by UCT in 2021
- [23<sup>rd</sup> International Congress of Zoology](#): Cape Town, 21-25 November 2021

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.

### Universities and higher education

- [SU renewable energy research to benefit from large British funding project](#) (sun.ac.za)
- [UKZN Secures COVID-19 Rapid Tester](#) (ukzn.ac.za)
- [UCT breathes LIFE into ventilator solution](#) (news.uct.ac.za)
- [Wits students showcase South African electronics research at top international workshop](#) (nrf.ac.za)
- [Of Hopes and Struggles: How Young African Scientists Experience Working Conditions in Academia \(A Review of the Next Generation of Scientists in Africa\)](#) (4sonlone.org)

### Science Councils and Statutory Organisations

- [ASSAf Standing Committee on Health COVID-19 Statement: The unanticipated costs of COVID-19 to South Africa's quadruple disease burden](#) (assaf.org.za)
- [South African National Standards \(SANS\) published in June 2020](#) (sabs.co.za)
- [SABS Standard Development Continues](#) (sabs.co.za)
- [SABS advises consumers to use tested and certified personal protective equipment](#) (sabs.co.za)
- [Local COVID-19 swab extraction kits to be produced at scale](#) (csir.co.za)
- [Faster, local COVID-19 test kits could be ready by year-end](#) (csir.co.za)
- [UP and CSIR sign a collaboration agreement on smart transport, cities and environments](#) (csir.co.za)
- [SAMRC and partners collaborate with industry locals to develop local diagnostics and reagents for COVID-19 testing](#) (samrc.ac.za)
- [Charting a healthier way forward for alcohol in SA, now and into the future](#) (samrc.ac.za)
- [Online portal for registering all research and innovation projects on COVID-19 in South Africa](#) (samrc.ac.za)
- [The Merits and Benefits of Studying Excess Deaths](#) (samrc.ac.za)
- [CSIR supports national COVID-19 response with locally developed ventilator](#) (CSIR)

### Palaeontology, Archaeology and Anthropology

- [Fossil plants could help Rhodes University PhD researcher solve a 200-year puzzle](#) (ru.ac.za)

### Space Science and Astronomy

- [Digital Earth Africa releases analysis-ready satellite data for all of Africa that can support COVID-19 response and recovery](#) (sansa.org.za)
- [Solar Cycle minimum deepest in centuries](#) (engineerit.co.za)
- [Accreting pulsar caught in the act of 'powering up'](#) (sao.ac.za)
- [SANSa and NASA make steady progress in a study activity](#) (sansa.org.za)
- [Space weather centre ready for a R100 m upgrade](#) (sansa.org.za)

- [Earth Observation Support Tools for Socio-economic Needs during the National Lockdown](https://sansa.org.za) (sansa.org.za)
- [SANSA Space Operations tracking Chandrayaan 2 to the Moon](https://sansa.org.za) (sansa.org.za)

## Medicine and health

- [We Thought It Was Just a Respiratory Virus. We were wrong.](https://www.ucsf.edu) (ucsf.edu)
- [The Access to COVID-19 Tools Accelerator \(ACT-Accelerator\) published its consolidated investment case, alongside the costed plans of the member organizations](https://www.who.int) (who.int)
- [Existing Feeding Recommendations for Birth to 24 Months Often Consistent; Opportunities Exist to Harmonize Guidance](https://www.nationalacademies.org) (nationalacademies.org)
- [COVID-19 promotes innovative HIV service delivery in Cape Town](https://theconversation.com) (theconversation.com)
- [Oxford's COVID-19 Vaccine Candidate Takes a Big Leap Forward, Showing Success in Early Trials](https://time.com) (time.com)
- [How COVID-19 threatens efforts to contain HIV/AIDS in South Africa](https://theconversation.com) (theconversation.com)
- [A tale of two pandemics: Is COVID-19 repeating the mistakes of HIV's past?](https://www.bhekisisa.org) (bhekisisa.org)
- [Air pollution, temperature and respiratory disease: a South African study](https://theconversation.com) (theconversation.com)
- [A 'medical plant' is in hot demand as South Africans seek relief for Covid-19 symptoms](https://news24.com) (news24.com)
- [Fever screening systems – when temperature matters](https://energize.co.za) (energize.co.za)
- [Coronavirus: What I learnt in Oxford's vaccine trial](https://www.bbc.com) (bbc.com)
- [Respiratory Syncytial Virus \(RSV\) vaccination of pregnant women could prevent pneumonia in babies](https://wits.ac.za) (wits.ac.za)
- [As SARS-CoV-2 Virus Evolves, Genomic Data Should Be Collected Alongside Patient and Public Health Data, Says New Report](https://www.nationalacademies.org) (nationalacademies.org)

## Environment, climate change and energy

### Environment

- [South Africa's 'Reclaimers' recycle bulk of nation's waste](https://www.voanews.com) (VOA News)
- [A pact to reduce plastics usage](https://www.resource.com) (ReSource May 2020)
- [South African study highlights growing number of landfill sites, and health risks](https://theconversation.com) (theconversation.com)
- [Antarctica more widely impacted by humans than previously thought](https://wits.ac.za) (wits.ac.za)
- [Children, pests and poisons: a toxic layering](https://news.uct.ac.za) (news.uct.ac.za)

### Energy

- [How Egypt banks on renewables to meet surge of energy demand](https://infrastructurenews.co.za) (infrastructurenews.co.za)
- [Dancing to the new generation](https://energize.co.za) (energize.co.za)
- [Electric vehicles could add to carbon emissions and load shedding: but there's a solution](https://theconversation.com) (theconversation.com)
- [Discussion: The need for renewable energy](https://www.eNCA.com) (eNCA)
- [Why wind and solar would offer the DRC and South Africa better energy deals than Inga 3](https://theconversation.com) (theconversation.com)
- [Going like the wind to provide light and power](https://energize.co.za) (energize.co.za)

## Women in Science

- [Breaking the STEM ceiling](https://libsyn.com) (libsyn.com)

## Agriculture

- [Pumping the agricultural sector](#) (energize.co.za)
- [Supporting innovation through a multi-level platforms approach: A case study of the South African fresh fruit industry](#) (tandfonline.com)
- [This is how rural areas can be developed through agriculture](#) (businesslive.co.za)
- [The State of Agricultural Engineering in South Africa with respect to Agro-Processing](#) (Agricultural Research Council)

## Technology and the 4<sup>th</sup> Industrial Revolution

- [Cloud technology for rapid Covid-19 testing](#) (engineerit.co.za)
- [Massive Rise in Cybersecurity Awareness Across Nigeria, Kenya and South Africa](#) (itnews.africa.com)
- [‘We don’t want a plastic-free world, we want a world free of litter’](#) (infrastructurenews.co.za)
- [South Africa to get Digital Sound Broadcasting](#) (engineerit.co.za)
- [Identifying the strength and weaknesses of the South African tech-based industries: Insights from the Swiss South African business development programme](#) (tandfonline.com)
- [Security, compliance, POPI and COVID-19](#) (itweb.co.za)
- [Big data is BIG, but it must be real-time](#) (engineerit.co.za)
- [Sharing a secret ... the quantum way](#) (wits.ac.za)
- [How paranoid should you be about the privacy of your images online? It depends](#) (dailymaverick.co.za)
- [Creating a 5G Future: The Role of Connectivity During a Pandemic](#) (itnewsafrika.com)
- [Huawei-Google clash is an opportunity for African search engines](#) (uj.ac.za)

## Infrastructure

- [Covid-19 pandemic renders construction industry vulnerable to scams](#) (infrastructurenews.co.za)
- [Waste management critical for large demolition projects](#) (engineerit.co.za)
- [COVID-19 peak may put a strain on water availability](#) (infrastructurenews.co.za)

## Lichenology

- [New lichen species discovered](#) (nwu.ac.za)

## Opportunities

- [Applications Open - Fulbright South African Research Scholar Program](#) (nrf.ac.za)
- [Falling Walls Remote 2020: The Breakthroughs of the Year](#): Call for [nominations](#) by institutions in 10 categories: Life sciences, physical sciences, engineering and technology, social sciences and the humanities, science in the arts, digital education, science and innovation management, emerging talents, science start-ups and science engagement. Deadline: 1 September 2020.
- [Request for Application: Eastern Cape Health Research and Innovation](#) Closings date: 11 September 2020
- [PhD Scholarships for Clinician-Scientists](#) Closing date: 31 August 2020



- Read all about the [winners](#) of NSTF-South32 2020 Awards on the NSTF website.

### **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.

#### **Privacy**

Registration details submitted to the NSTF will be treated confidentially and will only be used by NSTF to communicate with its members and subscribers.

### **For more information**

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