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NSTF e-Newsletter

S.E.T. for socio-economic growth

The (un)United States: The centre cannot hold (again)

Message from the NSTF Executive Director, Ms Jansie Niehaus

There was once the hope that the pursuit of truth through science and the use of innovative technology would make the world a better place for all humankind. That kind of hope should come with disclaimers – its realisation relies on good governance, and ethical decision making by the powers that be. [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. Watch the [video](#) and reminisce on past events and members participating over the 25 years of existence of the organisation.

NSTF milestones over 25 years

As the NSTF is celebrating its Silver Jubilee this year, we would like to look back over the years at the reasons for establishing the NSTF and share some highlights and milestones reached over 25 years.

The pre-cursor of the NSTF, the Science and Technology Initiative (STI), participated in South Africa's landmark CODESA Convention (Convention for a Democratic South Africa) in 1991. As a result of the findings and recommendations of the STI, government together with key SET stakeholders founded the NSTF in 1995 to oversee the establishment of the science system.

The then Minister of Arts, Culture, Science and Technology made his intention clear by recognising the body as a forum for [consultation and addressing SET issues](#) within the

broad SET community. This still proudly forms the main mandate of the NSTF today. The NSTF has continued to enjoy support from the Ministry and Department of Science and Innovation up to now, as well as stakeholders at all levels.

Highlights and milestones

The NSTF progressed under the leadership of three Executive Directors: Dr Xolani Humphrey Mkhwanazi (1997-1999), Dr James Hlongwane (1999-2005) and Ms Jansie Niehaus (since 2006). Five chairpersons provided valuable leadership: Prof Malegapuru Makgoba, Dr Steve Lennon, Mr John Marriott, Prof Brenda Wingfield and now Prof Ali Dhansay.

(For a full list of the highlights and milestones, see the just released [NSTF Annual Report for 2019/2020](#).)

1998 – The Year of Science and Technology and year of the NSTF Awards’ founding:

1998 was declared the Year of Science and Technology by the South African government and NSTF established the prestigious annual [NSTF Awards](#) to honour role models and reward excellent achievements in SET and innovation. The Minister of Science and Technology is the Patron of the Awards and officiates at every awards event. The NSTF also participated and added considerable value to initiatives and processes relating to the establishment of the National Research Foundation (NRF).

2002 – An important policy role: Played an active role in the evaluation, review and implementation processes of the National Human Resource Development Strategy, the National Research and Development Strategy and National Research and Technology Foresight Exercise.

2002 – Ethics discourse: Initiated debate and discussions on Ethics in SET in South Africa that produced a discussion document and a charter that aimed to establish a National Consultative Council on SET Ethics in South Africa.

2002 – World Summit on Sustainable Development (WSSD): NSTF received accreditation that allowed NSTF members and stakeholders to register as participants under the NSTF umbrella – an offer which over 60 organisations made use of. Each organisation registered employees to participate.

2002 – DST: Participated in the lobbying for the establishment of a separate government department that would focus entirely on SET in SA. The structure and plans for the new Department of Science and Technology (DST), now called the Department of Science and Innovation (DSI) were presented to the NSTF and its members for comment.

2003 – Growth and innovation: Commissioned a joint study between the NSTF and NACI (National Advisory Council on Innovation): Growth and Innovation Report on the interaction between economic growth, science, technology and human capital.

2003 – NEPAD: Substantially contributed to the development of the science and technology division of the New Partnership for Africa’s Development (NEPAD) to ensure that SET plays its rightful role on the African continent.

2003 – proSET: Created a new membership group, known as SETAG (Science, Engineering, Technology and Associated Group), consisting of professional bodies and learned societies. Some of the membership of the Associated Scientific and Technological Societies of South Africa (AS&TS) joined the NSTF under SETAG which was renamed [proSET \(Professional in Science, Engineering and Technology\)](#) in 2009. This [sector](#) accounts for about 32% of NSTF member organisations and has its own fund that contributes to projects related to professionals and SET education of member organisations of proSET.

2004 – STEM education: Aspired to change the face of education in South Africa by initiating discussions and leading national consultations that resulted in the formulation and implementation of the National Strategy for Mathematics, Science and Technology Education.

2005 – The Awards Communications sub-committee was established (currently known as the NSTF Awards Committee)

2006 – DST policies: Discussion of and stakeholder feedback on the National System of Innovation (NSI) and the DST's Ten Year Innovation Plan. DST presented their plans for the Technology Innovation Agency, Human Capital Development, the Youth into Science Strategy and the Hydrogen Economy.

2007 – NSTF registers as a “Section 21” company under the Companies Act.

Legislation was subsequently amended and all Section 21 companies were since referred to as 'non-profit companies'.

2007 – DST projects: NSTF laid the foundation and managed the National Youth Service on behalf of DST for five years, benefitting 330 young unemployed graduates with diplomas and degrees. The Programme provides science graduates with additional skills to enable them to find suitable employment, (currently run by SAASTA/NRF).

2007 – Bursary programme: NSTF laid the foundation and managed the DST's 'Incentive' Bursary Scheme for eight years, benefitting more than 70 students. These two programmes were formally evaluated and the reports are available on request. NSTF continues to promote bursaries to youth in South Africa to this day by managing an online, one-stop shop for [bursaries and SET careers](#) descriptions with seed funding from UNESCO (United Nations Educational, Scientific and Cultural Organization) and the DST in 2011, and currently sponsored by the Carl and Emily Fuchs Foundation.

2007/2008 – Science Councils and Statutory Bodies sector formed a sub-committee of their representatives in NSTF. NSTF member organisations in this [sector](#) consist of state agencies for research, innovation, the funding thereof, and the regulation of sectors related to SET and innovation. The majority of these members are founding members of the NSTF and make up 13% of member organisations.

2008 – NSTF Awards 10th anniversary celebrated with the then Minister of Science and Technology, Mosibudi Mangena as Patron of the NSTF Awards.

2008 – Brilliants Programme initiated to recognise top matric performers in physical science and mathematics (previously called the Education Recognition Programme, (ERP) initiated in 2001). Initially, the ERP recognised only top performing matric girls from all the provinces, top high school teachers, top schools, as well as STEM Olympiad and competition performers. Later, under the [Brilliants Programme](#), both boy and girl learners are recognised, and eventually NSTF focused only on the top performers in matric science and mathematics who go on to study in science, engineering and medicine careers.

2011 – BHP Billiton became co-branding [sponsor](#) of the [NSTF Awards up to 2015](#).

2015 – The 20th anniversary of the NSTF Awards and launching the new NSTF Awards' trophy: Manufactured from titanium and additive manufacturing (3D printing) processes, the new trophy was launched to celebrate the NSTF's second decade, and the United Nations International Year of Light and Light-based Technologies. The first [Special Annual Theme Award](#) was also introduced in the NSTF Awards.

2016 – South32, a resources company established when BHP Billiton demerged, became the second co-branding sponsor of the NSTF Awards.

2016 – Carl and Emily Fuchs Foundation sponsorship for their flagship 50th Anniversary programme was awarded to NSTF for three years, as one of 12 beneficiaries, for all NSTF [youth outreach programmes](#). The sponsorship was extended for one more year and comes to an end at 31 December 2020.

2018 – Organised DST consultations and the launch of DST's new Science, Technology and Innovation White Paper.

2018 – NSTF Awards celebrated its 20th anniversary with co-branding sponsor, South32.

2020 – NSTF celebrates its Silver Jubilee.

[S.E.T. for socio-economic growth](#)

Call for nominations: 2020/2021 NSTF-South32 Awards

The NSTF calls for nominations for the 2020/2021 [NSTF-South32 Awards](#) will be sent out soon. Please read the [requirements for nominations](#) carefully and register your [nomination\(s\)](#) electronically by **14 December 2020**.

More information on how to register and what is new this year will be posted on the NSTF Awards page on the website soon.

The NSTF's theme for 2021 is **Creative Economy for Sustainable Development**, aligned with the [International Year of Creative Economy for Sustainable Development](#), as declared by the United Nations. The Special Annual Theme Award for 2020/2021 will be made for an outstanding contribution to SET and innovation towards the creative economy for sustainable development in South Africa. The concept of **creative economy** is the income-earning potential of **creative** activities and ideas. The **creative economy** encompasses photography, graphic design, fashion design, filmmaking, architecture, publishing, video games and more. Sustainable Development refers to the Sustainable Development Goals (SDGs).

The graphic features a central blue silhouette of a person with arms raised, surrounded by icons: a megaphone, a brain with gears, a checkmark, and a large 'S' with 'NSTF' text. The text is arranged around these elements.

Promote South Africa's excellent work in SET and innovation

Further the understanding of science

Highlight SET role models

Be part of the prestigious NSTF-South32 Awards

National Science and Technology Forum

Innovation in South Africa: NSTF to participate in ISPIM conference

Join the NSTF's online participation in the International Society for Professional Innovation Management (ISPIM) [conference](#) on 7 December 2020: A panel of six South African experts, including current and recent NSTF Award Winners will discuss innovation challenges and breakthroughs as one of the African events in an around-the-globe series of virtual events.

NSTF 2020 AGM

The NSTF [Annual General Meeting](#) took place online on 13 November 2020 and the 2019/2020 Annual Report was launched. Members were pleased that NSTF delivered despite the pandemic and lockdown measures. Fourteen new members who joined since the last AGM were welcomed.

New NSTF members

The NSTF welcomes its new members:

- [Geostatistical Association of South Africa](#) (GASA) under the proSET Sector

A virtual panel will interact with the online audience as part of the *ISPIM CONNECTS GLOBAL - Celebrating the World of Innovation* initiative, with the NSTF participating on behalf of South Africa. Due to the COVID-19 pandemic, online sessions will take place around the world over 24 hours, starting in Japan and ending in Australia. The NSTF Panel's date is 7 December 2020 at 13:30-14:30.

NSTF Discussion Forums 2020 - 2021

Diarise the following NSTF [Discussion Forum](#) that will take place as an interactive webinar:

- 23 Nov 2020: Internet of Things technologies and 5G roll-out., brought to you by [proSET](#), the professional bodies and learned societies sector of the NSTF. See the invitation [here](#).

More information on future Discussion Forums:

- February 2021: How prepared are we for outbreaks of diseases among humans and animals? A discussion forum planned by the NSTF [Science Councils and Statutory Bodies](#) sector.
- April 2021: Plant Health Discussion Forum coming up.

Look out for the email invitations to these and other events.

Meet our 2020 NSTF-South32 Award winners

Management Award: Professor Judith Kinnaird, Associate Professor and Director: Economic Geology Research Unit; and Co-Director: DSI (Department of Science and Innovation) Centre of Excellence for the Study of Mineral and Energy Deposits, School of Geosciences at the University of the Witwatersrand received this award. Her focus areas have helped in the discovery and development of ore deposits that add value to society. These range from applying cutting-edge techniques for ore deposit exploration to building societal awareness around resources and the ethical issues regarding sustainable resource extraction. [Read more](#).

Engineering Research Capacity Development Award: Sponsored by Eskom since 2003

- Prof Josua P Meyer, Professor and Head: Department of Mechanical and Aeronautical Engineering; and Chair: School of Engineering, Built Environment and Information Technology, University of Pretoria was awarded for developing large numbers of engineering research graduates of the highest quality. The group, which consists of 10 academic colleagues and up to 50 full-time funded students, focuses on renewable energy using thermal solar (such as

- [Southern African Institute of Mining and Metallurgy](#) (SAIMM) under the proSET Sector
- [South African Geophysical Association](#) (SAGA) under the proSET Sector

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: memberships@nstf.org.za.

Share 'n Dare programme

This programme affords [NSTF-South32 Award winners](#) the opportunity to encourage and inspire the youth to pursue studies and [careers](#) in science, engineering, technology (SET) and innovation. It is sponsored by the [Fuchs Foundation](#).

Because of the Covid-19 pandemic, videos are produced, with each of the current Award winners giving career guidance and inspiring messages. These are posted on the NSTF YouTube channel to the playlist '[Career advice from top scientists](#)' and promoted on social media. Help us to reach young people and share the videos to as many contacts you can.

- concentrated solar power), nuclear and wind. They look at more efficient and suitable heat exchangers used in renewable energy systems. [Read more.](#)
- Dr Abimbola Olukemi Windapo, Associate Professor: Department of Construction Economics and Management, University of Cape Town, received the award for her research of construction business and management that confronts the problems of poor project and organisation performance from a practice perspective. This is a response to the high failure rates of many construction companies, particularly SMMEs (small, medium and micro enterprises), and the poor health and safety records in the industry. [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

ASSAf recognises outstanding achievement

The Academy of Science of South Africa (ASSAf) has [awarded fellowship](#) to 31 excellent scholars (researchers) in 2020. Among them are researchers who also won [NSTF Awards](#) in this year and the past:

- **Dr Hlumani Ndlovu**, a Senior Lecturer in the Division of Chemical & Systems Biology, Faculty of Health Sciences, University of Cape Town won the [2018/2019 TW Kambule-NSTF Award: Emerging Researcher](#)
- **Prof Jennifer Fitchett**, Associate Professor of Physical Geography, School of Geography, Archaeology and Environmental Studies at the University of the Witwatersrand and holds an NRF Y1 Rating. She was a finalist for the [2016/2017 Special Annual Theme Award](#) and a finalist for the [2018/2019 Emerging Researcher Award](#);
- **Dr Vhahangwele Masindi**, Research Scientist at Magalies Water, Research Fellow at UNISA and a part-time Lecturer at the University of Venda won the [2019/2020 TW Kambule-NSTF Award: Emerging Researcher](#);
- **Prof Tshilidzi Marwala** won the [2010/2011 Eskom-sponsored award: Male research capacity developer](#) over the last 5-10 years and in [2006/2007 the award for 'Research and its outputs'](#) over the last five years or less.

Bursaries available

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

- [BBD Software Development](#) (Deadline: 30 November 2020)
- [SAIBPP](#) (Deadline: 15 December 2020)
- [NRF](#) (Deadline: 18 December 2020)
- [Hexagon Trust](#) (Deadline: 31 December 2020)
- [PSG](#) (Deadline: 31 December 2020)
- [FMCSA Ford Bursary](#) (Open)

STEMulator.org competition launched

The [STEMulator](#) e-learning platform is available to learners and students to **Explore > Discover > Learn** the different fields of science, technology, engineering and mathematics (STEM).

The [proSET](#) Committee is now launching a competition exclusively to [proSET members](#), calling for any contribution/s of visual STEM content to populate the STEMulator further. The contributions stand a chance to win R12 000 (Twelve Thousand Rand only) each and feature on the STEMulator along with the winners' branding.

The notices of the competition have been emailed, and the initial [Call](#) is on the website.

Visit the directory for information on bursaries, SET [career](#) guidance and inspirational [role models](#). The Bursary Directory is sponsored by the [Carl and Emily Fuchs Foundation](#).

Mzansi Bright Sparks

Siphokazi Magagula matriculated at Sitintile Secondary School in Mpumalanga. She is one of the 19 first-year students who were recognised in the 2019/2020 NSTF [Brilliants Programme](#) for top marks in mathematics and physical science in the National Senior Certificate Examinations.

She is studying mathematical sciences at the University of the Witwatersrand and was interviewed on SAFM recently. Listen to the [interview](#).

“Mathematics opens so many doors for one, more than you can imagine.” – Siphokazi Magagula

Alienke Boot another Brilliants Student, is studying microbiology at the University of Pretoria. She matriculated at Hoërskool Zwartkops.

“I am studying BSc Microbiology and I think after the Covid-19 pandemic, no-one will doubt that this is an important subject!” – Alienke Boot

The Brilliants Programme is sponsored by the [Fuchs Foundation](#).

It explains how to enter and all the terms and conditions.



Survey of natural scientists in South Africa

[SACNASP](#), the legislated regulatory body for natural science practitioners in South Africa is conducting a survey of natural scientists in South Africa in conjunction with the [Human Sciences Research Council](#) (HSRC). Both organisations are members of the NSTF.

The study aims to enhance the understanding of the labour market transitions of natural science graduates. SACNASP would therefore like to explore the experiences post-graduation into the world of work.

The survey will assist SACNASP to better understand and support natural science professionals and will form part of a report entitled “Tracking employed, unemployed and underemployed natural science graduates”, which will be sent to the Department of Science and Innovation. Registered scientists will receive a Category 1 CPD point for completing the survey.



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 introduce new members of the [proSET sector](#).

- **Consulting Engineers SA (CESA) celebrates engineering excellence**

The country's leading built environment professionals gathered on 11 November for the 2020 [CESA](#) Aon Engineering Excellence Awards, hosted virtually for the first time. This year's awards, sponsored by Aon South Africa, celebrated innovation, quality, outstanding workmanship, and professionalism. Click [here](#) to view all the entrants and winners.

- **New member: The South African Geophysical Association**

The [South African Geophysical Association](#) (SAGA) was founded in 1977 to foster and encourage the development of Geophysics in South Africa and has since grown to over 350 members worldwide. SAGA hosts regular monthly talks, produces a topical newsletter, presents shorts courses annually, and runs biennial technical meetings. SAGA is administered by a council of elected officials, with elections taking place annually at the AGM and by postal ballot. Its biennial Conference, a staple of the geophysical fraternity in Africa, provides a forum for engagement, idea generation and sharing.

- **New member: South African Council for Automation and Control**

The [South African Council for Automation and Control](#) (SACAC) was formed in 1961 by the joint efforts of the CSIR and the professional Institutes of engineering, computers and control disciplines. The primary mission of SACAC is to promote the multi-disciplinary sciences of computation, automation and control and their application to industry in Southern Africa. SACAC is the nominated National Member Organisation for South Africa to IFAC (International Federation of Automatic Control).

Today SACAC comprises over 50 corporate and institutional members representative of leading corporations, tertiary educational establishments, professional institutions, research organisations and private companies involved in computation, automation and control. SACAC facilitates the interchange and dissemination of information about leading edge technologies and their application locally and internationally. This is done through organising symposia, workshops and other regular events. SACAC also provides a link between its members and various other national organisations, keeping them informed of any relevant developments.



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.

- [Medicines and Related Substances Act: Regulation: Transparent pricing for medicines and scheduled substance: Draft Dispensing fee pharmacists](#) (Comment by 21 November 2020)
- [Health Professions Act: The Ethical Rules of Conduct: Amendment](#) (Comment by 21 November 2020)
- [Health Professions Act: Regulations: Scope of profession of radiographers](#) (Comment by 21 November 2020)
- [Marine Living Resources Act: Reclassification of the White Mussel, Oyster and Hake Handline Fishing Sectors as Small-Scale Fishing Species](#) (Comment by 23 November 2020)

- [Marine Living Resources Act: Resource Split between Local Commercial and Small-Scale Fishing in the Traditional Linefish, Squid and Abalone Fishing Sectors](#) (Comment by 23 November 2020)
- [National Environmental Management: Waste Act: Intention to take a decision on applications for the exclusion of a waste stream or a portion of such a waste stream for beneficial use from the definition of waste](#) (Comment by 26 November 2020)
- [Higher Education Act: Draft proposal: Abolition of statutory status of committee of university principals, matriculation board and committee of technikon principals](#) (Comment by 7 December 2020)
- [Electronic Communications Act: Amendment: Pre-register for digital community television broadcasting service and radio frequency spectrum licences: Extension of closing date for comments to 15 January 2021](#)

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

- [Bioeconomy South Africa Portal launched](#) (dst.gov.za)

Energy

- [Independent transmission system “essential” to end load shedding](#) (energize.co.za)
- [Nxuba Wind Farm to add to grid](#) (infrastructurenews.co.za)
- [Unease as the race to improve power supply continues](#) (energize.co.za)
- [Electricity regulations on new generation capacity amended](#) (energize.co.za)
- [Licensing of generation facilities above 1 MW](#) (energize.co.za)

Environment

- [Drastic measures needed as post-lockdown carbon emissions surge](#) (infrastructurenews.co.za)
- [How fracking plans could affect shared water resources in southern Africa](#) (theconversation.com)

Agriculture

- [Agbiz policy brief on the Expropriation Bill, 2020 tabled in Parliament](#) (agbiz.co.za)
- [Food security and human welfare critical in trade agreements - South African Minister](#) (agbiz.co.za)
- [What next for the land the government wants to distribute?](#) (businesslive.co.za)

Education

- [The shame of 40 000 missing education certificates](#) (mg.co.za)
- [School maths: where do we go wrong](#) (wits.ac.za)
- [Why schools probably aren't COVID hotspots](#) (nature.com)
- [What South Africa's teachers brought to the virtual classroom during OVID-19](#) (theconversation.com)
- [4IR commission recommends radical changes to education system](#) (capetownetc.com)

Technology and the 4th Industrial Revolution

- [South African government urged to intensify focus on IOT](#) (itweb.africa)
- [Report of the Presidential Commission on the 4th Industrial Revolution](#) (gov.za)

Infrastructure

- [President Ramaphosa addresses the Infrastructure SA Project Preparation Round-Table](#) (eNCA)
- [Building a Better post-COVID Water Sector Advisory Note 2: The State of water services in South African Municipalities](#) (saae.co.za)
- [Anti-corruption strategy to support infrastructure plan](#) (infrastructurenews.co.za)
- [Sisulu calls on DWS and water boards to support SIU investigations](#) (infrastructurenews.co.za)
- [Building Better Cities: A new approach to housing and urban development](#) (cdde.org.za)

Medicine and Health

- [The false promise of herd immunity for COVID-19](#) (nature.com)
- [Important TB study sheds light on disease development](#) (dst.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.

- The [Triple Helix Association](#), [University of Bologna](#) and [ART-ER](#), the organisers of the [III International Triple Helix Virtual Summit](#), are working hard to offer this year a stimulating and engaging Summit, which will be delivered Online on 24-26 November 2020 on the theme “Designing globally connected regional innovation ecosystems: overcoming barriers and opening pathways”.
- [ASSAf Presidential Roundtable Discussion on the human question in artificial intelligence](#): Guest Speaker: Prof Margaret Levi, Sara Miller McCune Director of the Center for Advanced Study in the Behavioral Sciences, Stanford University - Frankenstein or Gods? The Impact of the New Technologies on What It Means To Be Human”. Zoom webinar, 25 November 2020 at 17:00. Click [here](#) to RSVP by 24 November 2020
- [Webinar](#) by Paul Romer, Nobel Prize 2018: Work as school – Jobs in developing countries, 25 November 2020, 16:00
- [2nd International Multidisciplinary Information Technology and Engineering Conference](#) (IMITEC): Kimberley, 25-27 November 2020
- [3rd Annual ASSAf Science-Business Leadership Forum](#): “South Africa’s Economic Recovery Post COVID-19”, Zoom webinar 26 November 2020, 09:00-11:00.
- [All-Atlantic Ocean Research Forum](#) (virtual): From Pole to Pole, South Africa, 3-4 December 2020. Register [here](#).
- [Water Institute of South Africa 2020 Conference](#): Online, 7-11 December 2020
- [IMESA Conference](#): This conference has been postponed to 2021. It will take place at the Cape Town ICC and rescheduled dates will be confirmed soon.
- [Citation Programme in Applied Geostatistics](#): Live online lecturing, Johannesburg, 18-22 January, 15-19 February, 15-19 March and 12-16 April 2021
- [WasteCon2020](#): Johannesburg, 9-11 February 2021

- [The Sixteenth Annual Public Health Conference](#) (PHASA2020): Tshwane, 15-17 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
- [16th International Conference on Space Operations](#): Cape Town 3-7 May 2021
- [African Utility Week and POWERGEN Africa](#), live event in Cape Town, 11-13 May 2021
- The [Bio2021 Conference](#) at Spier Wine Estate has been postponed to 26-29 September 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



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

- [Rain, Huawei and Wits University opened a 5G lab in Joburg](#) (stuff.co.za)
- [UCT's Prof Daya Reddy calls it a day](#) (uct.ac.za)
- [Zutari assists UCT to become a net zero water university by 2050](#) (infrastructurenews.co.za)

Science Councils and Statutory Organisations

- [CSIR puts the "I" centre stage with new logo](#) (engineerit.co.za)
- [CSIR unveils its refreshed brand and positioning statement](#) (csir.co.za)
- [SABS urges for the use of certified containers in the collection and disposal of hazardous waste](#) (sabs.co.za)
- The October [2020 issue of NECSA Today](#), official newsletter of the South African Nuclear Energy Corporation Ltd, is now available.
- [SAMRC - a part of new global health research to reduce the impact of COVID-19](#) (samrc.ac.za)
- ["I'm safe because you're safe": How COVID-19 brought science into our homes](#) – presented by South Africa's National Research Foundation (NRF) and the Embassy of Sweden, featuring a discussion between renowned epidemiologists Salim Abdool Karim, co-chair of the South African COVID-19 Ministerial Advisory Committee, and Anders Tegnell, Sweden's state epidemiologist. (bhekisisa.org)

Palaeontology, Archaeology and Anthropology

- [New fossil tracks belonging to human ancestors found in South Africa](#) (theconversation.com)

Botany and entomology

- [Researchers find new grass species in Maloti-Drakensberg area](https://www.ufs.ac.za) (ufs.ac.za)
- [Borer beetle-busting research on wine estate hopes to curb further invasions](https://www.citizen.co.za) (citizen.co.za)

Space Science and Astronomy

- [South African Astronomical Observatory Celebrates 200 Years of Astronomy](https://www.nrf.ac.za) (nrf.ac.za)
- [Nasa Osiris-Rex spacecraft lands on asteroid Bennu in mission to collect dust](https://www.theguardian.com) (theguardian.com)
- [Taking Flight: The Mars Helicopter Ingenuity and the Future of Mars Exploration](https://www.nationalacademies.org) (nationalacademies.org)

Medicine and health

- [Teen wins \\$25k for finding molecule that may disarm coronavirus](https://www.livescience.com) (livescience.com)
- [South Africa's low-cost doppler ultrasound is reducing stillbirths and improving primary health care services](https://www.samrc.ac.za) (samrc.ac.za)
- [International research collaboration to tackle antimicrobial resistance by tapping into South Africa's rich biodiversity](https://www.samrc.ac.za) (samrc.ac.za)
- [Can wildlife biosurveillance prevent future pandemics?](https://www.up.ac.za) (up.ac.za)
- [South Africans aren't being protected from fake sanitisers: what needs to be done](https://www.theconversation.com) (theconversation.com)
- [Getting the most out of medicinal plant extracts with nanotechnology](https://www.nwu.ac.za) (nwu.ac.za)
- [COVID-19 in the continent's children: UK award supports new research](https://www.uct.ac.za) (uct.ac.za)
- [Biomimicry control for Covid diagnostics: Wits researchers develop solution to improve accuracy and safety of Covid-19 testing](https://www.wits.ac.za) (wits.ac.za)

Environment, climate change and energy

Environment

- [Latest figures show growth in plastics recycling industry](https://www.infrastructurenews.co.za) (infrastructurenews.co.za)
- [Environmental committee calls for adherence to laws on plastics use](https://www.infrastructurenews.co.za) (infrastructurenews.co.za)
- ['Sleeping giant' Arctic methane deposits starting to release, scientists find](https://www.theguardian.com) (theguardian.com)
- [Cape Town settlements benefit from cool roofs this summer](https://www.energize.co.za) (energize.co.za)

Energy

- [South African project receives international energy award](https://www.csir.co.za) (csir.co.za)
- [Drivers improving the business case for solar power](https://www.energize.co.za) (energize.co.za)
- [Multi-plug adaptors pose a danger to consumers](https://www.energize.co.za) (energize.co.za)
- [Russian nuclear leader enters African wind energy market](https://www.energize.co.za) (energize.co.za)

Genetics

- [Major new African genome study finds varieties that inform African history, migration and immunity](https://www.wits.ac.za) (wits.ac.za)

Infrastructure

- [Consulting Engineers Protecting Lives and Livelihoods Webinar Episode 1 – hosted by CESA](https://www.gotostage.com) (gotostage.com)

- [Empowering SMMEs in construction is a win-win situation](https://www.infrastructurenews.co.za) (infrastructurenews.co.za)

Agriculture

- [Strengthen your network and amplify your brand at the Agbiz Congress 2021 Exhibition](https://www.agbiz.co.za) (agbiz.co.za)
- [How digitised supply chains can help multiply Africa's crop yields](https://www.ft.com) (ft.com)
- [Dust in the atmosphere is a sign of trouble in South Africa's maize fields](https://www.theconversation.com) (theconversation.com)
- [Bigger planting area is ultimately good news for South Africans](https://www.businesslive.co.za) (businesslive.co.za)
- [Changes in South Africa's rainfall seasons could affect farming and water resources](https://www.theconversation.com) (theconversation.com)
- [LEAP-Agri OPTIBOV training of small-holder farmers, women and youth](https://www.arc.co.za) (ARC)

Science engagement

- [Q&A: Objective science news needed now more than ever](https://www.scidev.net) (scidev.net)
- [Sibo's story helps children understand COVID-19](https://www.scibraai.co.za) (scibraai.co.za)
- [UP prof hosts 'Lightning Pathologist', an electrifying new series on People'sWeather](https://www.up.ac.za) (up.ac.za)

Innovation

- [R5 million injected into economy through innovation competition](https://www.engineerit.co.za) (engineerit.co.za)

Technology and the 4th Industrial Revolution

- [Putting Games to Work in the Battle Against COVID-19](https://www.nationalacademies.org) Play the winning games! (nationalacademies.org)
- [Avoid stumbling blocks on your AI journey](https://www.engineerit.co.za) (engineerit.co.za)
- [How COVID-19 accelerated SA's move to the gig economy](https://www.itweb.co.za) (itweb.co.za)
- [Tech-based jewellery safety solution shines at GBV hackathon](https://www.itweb.co.za) (itweb.co.za)
- [New research: Huge ICT entry-level job demand for 2021](https://www.bizcommunity.com) (bizcommunity.com)

Opportunities

- [RAIN is looking for talented individuals, including Data Analytics.](https://www.rain.co.za) (rain.co.za)
- If you're looking for fellowships, research funding or scholarships, a new website from Nature Careers [offers thousands of funding opportunities](https://www.naturecareers.co.za). 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](https://www.naturecareers.co.za).
- [France - South Africa Scholarship Programme](https://www.france-southafrica.org): This call for applications is open for students who intend to start their studies in France in September 2021. Deadline for online applications: 20 January 2021. Laureates will follow a specific programme in South Africa from March to July 2021. This track will include online French courses organised by the network of the Alliances Françaises. It may also include an internship in French Companies based in South Africa, depending on the opportunities and the profile of each laureate. This call for applications is open to all fields of studies.
- [Young Scientists Summer Program Applications Open](https://www.iiasa.ac.at): IASA offers PhD student fellowships to undertake a summer project on a topic related to the IIASA research agenda.



- [2020 Top Scholars in South Africa Honoured](http://assaf.org.za) (assaf.org.za)
- [SA Wine Industry Innovation Challenge winners announced](http://innovationsummit.co.za) (innovationsummit.co.za)
- [Nontando Zintle Ngamlana: Making unseen people visible](http://msn.com) (msn.com)
- [South African scoops first prize in BRICS Young Innovator competition](http://dst.gov.za) (dst.gov.za)
- [Grassland Science Student's Project Wins Award](http://ukzn.ac.za) (ukzn.ac.za)
- [UKZN Researcher gets Prestigious International Grant for HIV Study](http://ukzn.ac.za) (ukzn.ac.za)
- [Researchers receive sought-after prize from ATKV](http://nwu.ac.za) (nwu.ac.za)
- [UCT researcher wins Newton Prize 2020](http://uct.ac.za) (uct.ac.za)
- [Wits researcher receives \\$150 000 Jennifer Ward Oppenheimer grant](http://wits.ac.za) (wits.ac.za)
- [Pinky Mokwena of TUT was named one of the 10 FameLab International finalists](#)

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

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