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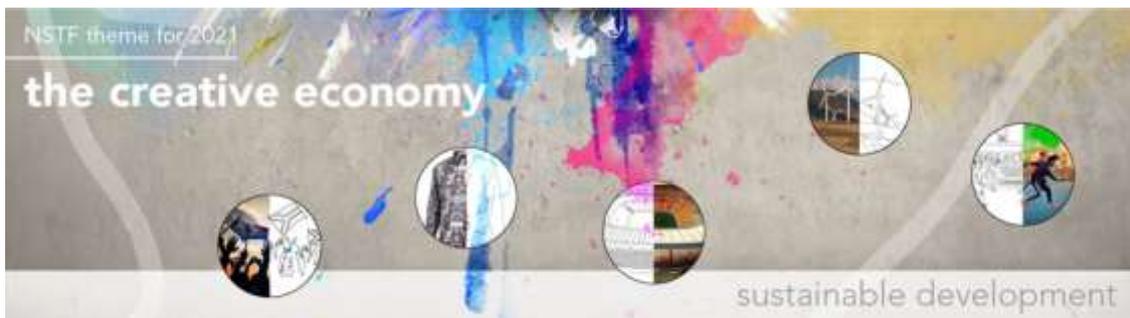
NSTF e-Newsletter

S.E.T. for socio-economic growth

Tribute to Lionel

Message from the NSTF Executive Director, Ms Jansie Niehaus

This month, I am doing something unusual – I am writing a very personal article, a tribute to my late husband, the artist Lionel Murcott (December 1947 – June 2021). I found to my immense surprise that his life has a thematic link with the UN International Year and the NSTF theme for the year: Creative Economy for Sustainable Development. [Read](#) the ED's message.



NSTF News

Postponed: Gala event to celebrate the NSTF-South32 Awardees

The [gala event](#) of the 2020/2021 [NSTF-South32 Awards](#) has been postponed. It will now take place on **Thursday, 30 September 2021**. This decision was taken because of the current Covid-19 level 4 restrictions in South Africa.

The hybrid event will be broadcast live simultaneously from venues in Johannesburg and Cape Town via the NSTF [YouTube](#) channel. The 23rd annual group of [finalists](#) will be honoured and the winners announced at this prestigious occasion.

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



Twenty years of recognising youth excellence in physical science and mathematics

Every year for the past 20 years, the NSTF has been celebrating matriculants who excel in physical science and mathematics and who specifically plan to pursue studies in science, engineering, technology (SET) or medicine. The NSTF honours and recognises these [Brilliant](#)s students at the NSTF-South32 [Awards Gala evening](#) each year.

The **Brilliant Speakers Programme** was launched in 2011 when the NSTF invited several speakers (role models) from the SET and innovation community to make these exceptional youngsters aware of the various career opportunities and the importance of personal and professional development.

In the following years, this Programme became an institution. Speakers representing a variety of SET fields address them on topics such as life skills, university life, creative thinking and profile building. Students are encouraged to continue with their chosen field of studies, and to find their way to an appropriate career path.

Ms Jansie Niehaus, NSTF Executive Director usually welcomes the students and introduces the speakers. Representatives of the sponsors of the [NSTF youth programmes](#) and the Awards are invited to address the students. [NSTF Award winners](#) are invited to meet and address the Brilliant students.

Evaluation forms collect data on the Programme each year. It appears that the students enjoy listening to all the speakers as each brings a unique and important aspect to the Programme that inspires them.

The achievements of each student are recognised with a certificate, presented by the NSTF Chairperson at a special ceremony.

Presentations, videos and proceedings of the Plant Health Discussion Forum now available

The [presentations](#) and [videos](#) of the Discussion Forum on **Plant Health – threats to biosecurity, biodiversity and food security** that took place on 10-11 June are available on the NSTF website and YouTube channel.

The [proceedings](#) of this online virtual event can now also be accessed on the website. Enquiries should be directed to [Ms Gabriela](#)

Welcome to two new members

The NSTF welcomes two new members:

- [Education, Training and Development Practices Sector Training Authority](#) (ETDP SETA)
 - Science Councils & Statutory Bodies sector
- [CodeMakers \(SuperScientists\)](#)
 - Civil society/NGOs sector

If you are interested in becoming a member, visit the [Membership section](#) on the website for more information about the NSTF. Request an application form from [Mr Matome Mphela](#) on email.

[Mankune](#).

Save these dates for upcoming Discussion Forums

The Discussion Forum under the auspices of [proSET](#) will be on **4IR Technologies and Connectivity**. It is scheduled for 9-10 September.

The Discussion Forum on the international theme **Creative Economy for Sustainable Development** is planned for 14-15 October. The NSTF aims to highlight initiatives that bridge the gap between creativity and science/technology, and to discuss significant societal issues relating to these.

Please send ideas of topics and speakers for these Discussion Forums to [Ms Gabriela Mankune](#).

Bursaries available

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

- [Sappi bursary opportunities](#) (Deadline: 30 September 2021)
- [FMCSA FORD Bursary](#) (Open)

Visit the NSTF [bursary website](#) for information on [SET careers](#) and [inspiring people](#) who work in these areas.



[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](#).

- **GSSA calls for donations to support rebuilding of UCT Plant Conservation Archives**

The [Grassland Society of Southern Africa](#) (GSSA) calls for donations to support the rebuilding of the UCT Plant Conservation Archives – an important asset to rangeland ecology in this region. The April 2021 fire at the university gutted many important institutions, including the Plant Conservation Unit. Donations will contribute significantly to the development of the rePhotoSA database and to make it more accessible to all people interested in natural landscapes in southern Africa. [Read more](#).

- **South African Institute of Electrical Engineers**

The [South African Institute of Electrical Engineers](#) (SIEE) announced that the full public versions of the **IHS Markit Super H2igh Road Scenario presentation on green hydrogen for South Africa**, presented at the 3rd Green Hydrogen Webinar for South Africa on 8 June 2021, are now available by following this [link](#). The report is expected to give government, labour and business stakeholders a strong fact-base on the opportunity that hydrogen, and ammonia and other power-to-x fuels can offer to South Africa's economic recovery plan to transition to a net-zero carbon pathway, growing the economy, creating jobs, developing national and export energy resources, and helping address climate change and to contribute to the just energy transition.

- **SASRI welcomes new Director**

The [South African Sugarcane Research Institute](#) (SASRI) welcomes Dr Terence Stanger (Terry) to the position of Director. Terry takes over the reins from Dr Carolyn Baker, who retired in March this year after a 12-year stint at the helm. [Read more](#). The 2019/20 SASRI [Progress Report](#) now available. The Chairman and Director reports provide insights to the many challenges that SASRI has been faced with and highlights some of the remarkable outcomes that have been delivered despite the financial constraints imposed on the Institute.



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.

- [Architectural Profession Act: Requirements for recognition and maintenance of recognition for voluntary association: Amendments](#) (Comment by 7 July 2021)
- [Draft National Green Finance Taxonomy](#) (Comment by 14 July 2021)
- [Mineral and Petroleum Resources Development Act: National Mine Closure Strategy](#) (Comment by 23 July 2021)
- [Occupational Health and Safety Amendment Bill: Amendments](#) (Comment by 31 July 2021)
- [National Environmental Management: Waste Act: National Norms and Standards for the Treatment of Organic Waste](#) (Extension of deadline for comments to 31 July 2021)
- [Medicines and Related Substances Act: Regulations: Medical Devices](#) (Comment by 25 August 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.

Energy

- [President announces major reform to enable investment in embedded generation and promote energy security](#) (gov.za)

- [Wind can provide surplus power immediately](http://energize.co.za) (energize.co.za)
- [Fishermen fear Karpowership will kill their livelihoods](http://techcentral.co.za) (techcentral.co.za)
- [Govt rejects Karpowership bid for environmental permits](http://news24.com) (news24.com)

Agriculture

- [SA's Rooibos tea gets historic EU protection, joining the likes of Champagne](http://msn.com) (msn.com)
- [Sub-Saharan Africa's Agriculture and COVID-19: How the Pandemic Will \(re\)Shape Food Markets](http://saiia.org.za) (saiia.org.za)
- [Agbiz/IDC Agribusiness Confidence Index shoots to record high in Q2, 2021](http://agbiz.co.za) (agbiz.co.za)

Education

- [Covid-19 lockdown hit TVET students hardest, finds HSRC](http://businesslive.co.za) (businesslive.co.za)
- [Covid-19: Survey finds 65% of students reported psychological distress in 2020](http://dailymaverick.co.za) (dailymaverick.co.za)
- [Dept Concerned About Psychological Impact of Lockdown on Students](http://careersportal.co.za) (careersportal.co.za)
- [Why investing in the digital classroom is essential](#) (EngineerIT, p22)
- [WhatsApp + maths tutors = a solution for poor learners](http://wits.ac.za) (wits.ac.za)
- [UJ's TechnoLab upskilling teachers with free robotics and coding workshops](http://uj.ac.za) (uj.ac.za)
- [Counting the cost of lost schooling in South Africa](http://theconversation.com) (theconversation.com)

Technology and the 4th Industrial Revolution

- [Data policy won't help govt spy on anyone, says Ndabeni-Abrahams](http://itweb.co.za) (itweb.co.za)
- [President signs Cybercrimes Bill into Law](http://engineerit.co.za) (engineerit.co.za)
- [CSIR launches roadmap to address challenges that hinder smart settlements in South Africa](http://csir.co.za) (csir.co.za)

Infrastructure

- [Minister Lindiwe Sisulu calls on engineers to contribute to development agenda of the country](http://gov.za) (gov.za)
- [Sisulu determined to root out corruption in water department](http://infrastructurenews.co.za) (infrastructurenews.co.za)
- [Water experts warn of the possibility of a day zero water shortage crisis](#) (SABC News)
- [TCTA raises R15bn for Lesotho water project](http://infrastructurenews.co.za) (infrastructurenews.co.za)
- [30% of South Africa's paved road network is in very poor condition](http://infrastructurenews.co.za) (infrastructurenews.co.za)

Medicine and Health

- [Minister Blade Nzimande welcomes WHO announcement on South Africa's first Coronavirus COVID-19 mRNA vaccine technology transfer hub](http://gov.za) (gov.za)
- [Coronavac application at advanced stage, no decision on Sinopharm, Moderna – SAHPRA](http://polity.org.za) (polity.org.za)
- [Supporting Science in Africa's Pandemic Response](http://nationalacademies.org) (nationalacademies.org)
- [26 International experts to kickstart the One Health High Level Expert Panel \(OHHLEP\)](http://who.int) (who.int)
- [Let Scientific Evidence Determine Origin of SARS-CoV-2, Urge Presidents of the National Academies](http://nationalacademies.org) (nationalacademies.org)
- [Research finds that the COVID-19 vaccination programme discriminates against the poor](http://uj.ac.za) (uj.ac.za)

- [Top scientists unite to launch Pan-African Disease Foundation](http://nwu.ac.za) (nwu.ac.za)

Climate change and environment

- [Opening statement by President Cyril Ramaphosa at the Committee of African Heads of State and Government on Climate Change \(CAHOSCC\)](http://gov.za) (gov.za)
- ['Our Planet, Our Future' Statement Signed by 126 Nobel Laureates Delivered to World Leaders Ahead of G-7 Summit](http://nationalacademies.org) (nationalacademies.org)
- [Forestry, Fisheries and Environment publishes final amendments to National Estuarine Management Protocol](http://gov.za) (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.

- [Breaking down barriers for women in construction](#): Virtual webinar, 6 July 2021, 11:00-12:30
- [Grassland Society of South Africa Congress 56](#), Oudtshoorn, Western Cape, 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.
- [SA Innovation Summit](#): Cape Town and online, 21-23 September 2021. Early bird price for registration available until 15 June.
- [6th Malaria Research Conference 2021](#): Virtual event, 3-4 August 2021
- [SAAFoST Virtual Congress 2021](#): 20-22 September 2021
- [2nd African Nuclear Physics Conference \(ANPC\)](#): Virtual event, 20-24 September 2021
- [Sustainability Summit 2021](#): Live virtual event, 21-23 September 2021
- The [Bio2021 Conference](#), Spier Wine Estate, 26-29 September 2021
- [WindAc Africa Conference 2021](#): Cape Town, 5-7 October 2021
- [WINDABA 2021](#) with the theme, "Renaissance of the Wind Energy Industry - Delivering Economic Benefits for SA": Cape Town, 7-8 October 2021
- [IFAT Africa](#), Africa's leading trade fair for water, sewage, refuse and recycling: Johannesburg, 2-4 November 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
- [World Science Forum](#): Cape Town, 8-10 December 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

- [Launch of AUDA-NEPAD Centre for Excellence in Science, Technology and Innovation](http://csir.co.za) (csir.co.za)
- [CSIR establishes programme to stimulate adoption of graphene technologies in SA](http://engineerit.co.za) (engineerit.co.za)
- [CSIR and COEGA set to establish biofibre in Eastern Cape](http://engineerit.co.za) (engineerit.co.za)
- [Global Research Council agrees way forward on mission-orientated research and public engagement](http://nrf.ac.za) (nrf.ac.za)

Tertiary institutions

- [The Wits Quantum Initiative launches at Wits](http://wits.ac.za) (wits.ac.za)

Space Science and Astronomy

- [Making heaven in a lab: Scientists solve aurora mystery](http://dailymaverick.co.za) (dailymaverick.co.za)
- [Physicists revisit the Fanaroff-Riley classification system](http://ru.ac.za) (ru.ac.za)
- [MeerKAT's stunning image reveals cosmic threads, ribbons and rings](http://sarao.ac.za) (sarao.ac.za)
- [SAAO 200 Astrophotography Competition Winners Announced](http://sao.ac.za) (sao.ac.za)

Palaeontology and Archaeology

- [Fossil find introduces a new ancestor to the jackal family tree](http://theconversation.com) (theconversation.com)
- [How pots, sand and stone walls helped us date an ancient South African settlement](http://theconversation.com) (theconversation.com)

Plant and Animal Science

- [Rhino anti-poaching research goes nuclear](http://wits.ac.za) (wits.ac.za)
- [Bees find it easier to drink warmer nectar](http://up.ac.za) (up.ac.za)
- [The sex organs of baobab flowers may solve the puzzle of trees that bear more fruit](http://theconversation.com) (theconversation.com)

Ichthyology

- ['Living fossil' fish may live for up to a century](http://bbc.com) (bbc.com)
- [Improving shark conservation in South Africa](http://uct.ac.za) (uct.ac.za)

Biodiversity

- [Nothing could have prepared me for the Kruger National Park](http://msn.com) (msn.com)

Medicine and health

- [Stats SA: Here are the most common causes of death in each province](#) (msn.com)
- [Genetic determinants of rheumatic heart disease risk in black Africans identified](#) (uct.ac.za)
- [Groote Schuur Hospital performs South Africa's first bowel enteroscopy](#) (uct.ac.za)
- [The urgency and necessity of African home-grown medical initiatives](#) (ru.ac.za)

Epidemics – human and animal

- [Trial of potentially variant-proof vaccine ongoing in Western Cape](#) (spotlightnsp.co.za)
- [Wastewater-based surveillance gives early warning of Covid-19 resurgence](#) (infrastructurenews.co.za)
- [A blueprint for preventing another pandemic](#) (time.com)
- [Three for three: Understanding the 3 COVID variants circulating during SA's third wave](#) (bhekisisa.org)
- [Survey to unearth health info practices around Covid-19 in SA](#) (wits.ac.za)
- [University collaboration reaches promising Covid-19 vaccine results](#) (nwu.ac.za)

Environment

- [New WWF report looks at recycling in South Africa from an industry perspective](#) (infrastructurenews.co.za)
- [Latest report highlights areas that SA's marine protected areas need to address](#) (infrastructurenews.co.za)
- [More drought, dust storms and heavy rains expected to spread disease](#) (up.ac.za)

Women in Science

- [Bright future for women in electrical engineering](#) (engineerit.co.za)

Energy

- [Winning bid brings progressive renewable energy plan to SA](#) (energize.co.za)
- [Why southern Africa's interior is an ideal place to generate solar energy](#) (theconversation.com)

Infrastructure

- [Old wind turbines are being reborn as bridges in Ireland](#) (euronews.com)
- [UFS Engineering Sciences leads research on eco-friendly concrete](#) (ufs.ac.za)

Agriculture

- [South African olive oil producers win big on global stage](#) (capetalk.co.za)
- [Ghost towns across South Africa a growing concern for the farming community](#) (wandilesihlobo.com)
- [UP's Engineering 4.0's 'smart avos' key to determining impact of transportation conditions on agricultural products](#) (up.ac.za)

Technology and the 4th Industrial Revolution

- ['Pay by car', not by card!](#) (engineerit.co.za)
- [CSIR qualifies to provide low-cost internet to underserved areas](#) (csir.co.za)
- [TV White Space technology rolled out in rural KZN](#) (engineerit.co.za)
- [Solar Boat going solo soon in Nelson Mandela Bay](#) (mandela.ac.za)

Opportunities

- The Milken Institute and the Motsepe Foundation have launched the [Milken-Motsepe Innovation Prize](#) in AgriTech, a multi-year initiative to focus global innovators and entrepreneurs on developing technological solutions that accelerate progress towards implementing the United Nations' Sustainable Development Goals (SDGs), with a spotlight on the African continent. The winning team will receive a \$1 million grand prize, with \$1 million in additional prizes. Closing date: 08 December 2021.



- [Prof. Linda Godfrey raises the CSIR flag high](#) (csir.co.za)
- [NRF Board Chairperson, Dr Nompumelelo Obokoh, appointed to the Independent Science for Development Council](#) In this role Dr Obokoh will be offering independent, strategic advice to the CGIAR (Consortium of International Agricultural Research Centers) System Council. (nrf.ac.za)
- [Prof Jennifer Thomson confirmed as Organization for Women in Science for the Developing World \(OWD\) President](#) (assaf.org.za)
- [In remembrance: Professor Tania Douglas](#) Prof Douglas won the [2016 NSTF Award](#): Distinguished Young Black Researcher. (uct.ac.za)
- [Dr Keneiloe Molopyane: South Africa's underground astronaut](#) (dailymaverick.co.za)
- [Wits neuropsychologist awarded prestigious global scholarship](#) (wits.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.

STEMulator.org attracts learners and students to the exciting world of science, technology, engineering and mathematics (STEM). It provides a virtual world full of stimulating content to excite and inform the youth, including STEM career guidance. Established under the auspices of the NSTF proSET membership sector (Professionals in *science, engineering and technology*).

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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