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on behalf of National Science and Technology Forum <enquiries@nstf.co.za>
Sent: Monday, 11 December 2017 4:30 PM
To: Sue
Subject: NSTF eNews: Focus on climate change plus more



Message from NSTF Executive Director

Climate and other changes

Ms Jansie Niehaus, NSTF Executive Director, discusses climate change and Trump's attitude to this. She also looks at what's happening in South Africa – from pausing on clean energy to the nuclear build programme. Note that in 2018, the NSTF is focusing on 'Sustainable Energy for All'. [Read more](#).



NSTF News

Notes from the 'Evidence for climate change' Discussion Forum

The NSTF hosted a mini discussion forum on 17 November 2017. See the [report back](#), [YouTube video](#), and [other information](#) from this event.

Thank you to our members

The NSTF is taking a short break after a very busy year. We are closing on 15 December 2017 and opening on 8 January 2018. A big thank you to our members and stakeholders for all your participation throughout the year as we drive the science, engineering, technology and innovation agenda forward.

The NSTF wishes you a wonderful festive season.

Call for nominations – 2017/2018 NSTF-South32 Awards

The deadline for [NSTF-South32 Awards](#) registrations is upon us – December 2017 (#NSTFawards2018). Do ensure that you [register nominees](#).

The NSTF [calls for nominations](#) for the 20th prestigious [NSTF-South32 Awards](#) in science, engineering and technology (SET) and innovation. The theme is the [International Decade of Sustainable Energy for All](#) (2014-2024) as declared by the United Nations.

[Register nominations](#) for individuals, teams and organisations for an outstanding contribution to science, engineering and technology (SET) and innovation in South Africa. The contributions that are recognised under nine [categories](#) are:

- Scientific research
- Capacity building in engineering research
- Innovation
- Environmental sustainability and biodiversity
- Water management solutions
- Management of SET and innovation
- Science Communication
- Technology transfer
- Education and training
- Special Annual Theme Award for contributions that promote Sustainable Energy for All

New members

The NSTF would like to welcome its new members:

- [The Ukuqonda Institute](#) – part of the Civil Society sector
- [The Yazi Centre for Science and Society in Africa](#) – part of the Civil Society sector
- [Afri-Sky Holdings \(Pty\) Ltd](#) – part of the Business/SMMEs sector
- [Luhlaza Foundation](#) – part of the Civil Society sector

Getting to know our award winners: Dr Robyn Pickering

When a fossil is too old for one technique, and the rock around it too young for another, dating a find can be almost impossible. Now Dr Robyn Pickering, isotope geochemist from the University of Cape Town, has successfully adapted uranium-lead dating techniques to provide the first set of direct ages for the caves in which early human fossils were found in South Africa. Her work has changed the way this record is viewed around the world. [Read more](#) about her work. She is one of the winners of the [2016/2017 TW Kambule-NSTF Awards: Emerging researchers](#).

Bursary Directory (sponsored by the Fuchs Foundation)

Find the latest bursaries in science, engineering and technology (SET). Recently-added bursaries include those from:

- [Ephraim Mogale Local Municipality](#)
- [South African Association for Food Science and Technology Undergraduate Bursary](#) (field of Food Science and Technology)

Visit the [NSTF Bursary Directory](#) to find information on available bursaries, the different SET careers, and inspiring stories of people in SET.

November Share 'n Dare activities (sponsored by the Fuchs Foundation)

Activities: NSTF Executive Director Ms Jansie Niehaus, was [interviewed](#) on [tru fm](#)'s science and technology feature on 11 November 2017. The focus was on the NSTF Share 'n Dare Programme.

Collaborate with the NSTF: Organisations that would like to collaborate on outreach with the [Share n Dare programme](#) – and have an [NSTF Award winner](#) speak to their staff/audience/community – please contact the NSTF on enquiries@nstf.co.za. The Share 'n Dare Programme is youth outreach associated with the NSTF-South32 Awards. As role models, the winners typically share their personal life story of what sparked their interest, how they planned their journey to study and their career.

Brilliants programme (sponsored by the Fuchs Foundation)

Learn more about [Romal Naidoo](#) from KwaZulu-Natal. She is studying for a Bachelor of Medicine and Bachelor of Surgery (MBChB) at the University of KwaZulu-Natal.

She is one of the first-year students who were recognised in the [2016/2017 NSTF Brilliants Programme](#) for top marks in mathematics and physical science in the National Senior Certificate Examinations.

“Seize every opportunity and do not let the small moments pass you by.”



Featured SET policy: NDP part 6 – Developing a strong network of economic infrastructure – transport, energy, water resources, and ICT

In a series of articles, the NSTF is unpacking the National Development Plan (NDP). Part 6 looks at the critical infrastructure needed to drive the economy. Transport, energy, water

resources, and ICT are also major themes within science, engineering and technology. [Read more](#).

[Click here](#) for the complete document of all the previous summaries.

SET-related policies currently open for public comment

The NSTF urges the science, engineering and technology (SET) community to actively participate in policy development. Commenting on policies plays a key role in developing a democratic SET environment and it is the primary mandate of the NSTF.

- [National Energy Regulator Act: National Energy Regulator of South Africa: Nominations invited](#) (Comment by Friday, December 22, 2017)
- [Science and Technology Laws Amendment Bill: Draft](#) (Comment by Wednesday, December 27, 2017)
- [National Advisory Council on Innovation Act: Council: Nominations invited](#) (Comment by Friday, January 19, 2018)
- [Health Professions Act: Regulations: Qualifications for registration of dental assistants: Amendment](#) (Comment by Saturday, January 27, 2018)
- [Medicines and Related Substances Act: Regulations: General - bonusing: Comments invited](#) (Comment by Wednesday, February 28, 2018)

SET-related policy news

Medicine and health

- [South Africa moves one step closer to a sugar tax – and a healthier lifestyle](#) (The Conversation)
- [National Assembly approves sugar tax](#) (BizCommunity)
- [Plans to accommodate foreign-trained medical graduates](#) (SAnews)
- [NHI could mean uncomfortable trade-offs, Davis Tax Committee warns](#) (BizCommunity)
- [Southern Africa is slipping again after coming close to eliminating malaria](#) (The Conversation)
- [How Africa is burdened by viral hepatitis](#) (SciDevNet)
- [Securing a place for South Africa's next generation of doctors](#) (BizCommunity)

Energy mix

- [South Africa to scale down nuclear expansion plan](#) (polity.org)
- [Lighting the world—electrification strategies for Sub-Saharan Africa](#) (phys.org)
- [Renewables-heavy mix is South Africa's cheapest option, yet another study confirms](#) (polity.org)
- [Scientists urge the use of geothermal energy](#) (Business Day)
- [Academy of engineers calls for nuclear procurement halt until IRP consensus is reached](#) (polity.org)
- [No further IRP consultations as Cabinet approves plan and 27 renewables projects](#) (Engineering News)

- [CSIR signals renewables-led electricity mix by 2050](http://polity.org) (polity.org)

Education

- [Have your say on Basic Education Laws Bill](#) (SAnews)
- [Bill to put end to fake academic qualifications approved by Cabinet](#) (polity.org)

Environment, water and food

- [SA committed to reducing pollution](#) (SAnews)
- [Food supply problems mean 1-billion people go hungry every day](#) (Business Live)
- [Private sector called to invest in water sector](#) (SAnews)
- [SA re-elected to IMO Council](#) (SAnews)

General

- [Good news for job seeking graduates](#) - Cabinet approves the Public Service Graduate Recruitment Scheme Framework. (SAnews)
- [Six barriers that make it difficult for African states to use research for policy](#) (The Conversation)
- [2015/16 National Survey of Research and Experimental Development](#) (DST)
- [GovChat brings government closer the people](#) (SAnews)
- [Are you an innovator in the human settlements sector?](#) (DST)

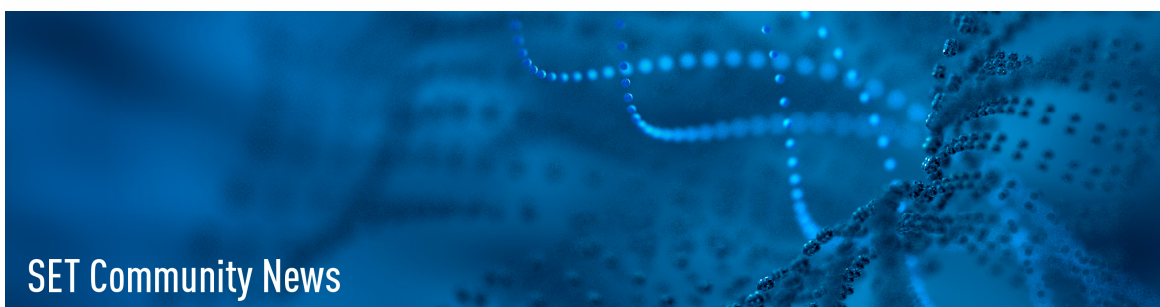


- **HSRC [Centre for Science, Technology and Innovation Indicators](#)' 2018 Innovation and Development Week:** 22-26 January 2018. The aims are to connect actors, in South Africa and from abroad, working at the interface of innovation and development policy and practice; and to zero in on key themes and experiences. If you or a colleague would like to stay abreast of the Week's programme, and you are not already on the CeSTII mailing list, please [sign up](#). Note that remote video link venues in Durban, Pretoria and Sweetwaters will be set up to widen participation. Online participation will also be possible through the VidYo platform. Details to follow.
- [Africa Energy Indaba](#): Johannesburg, 20-21 February 2018
- [2nd international Women in Science Without Borders \(WiSWB\)-Indaba \(conference\)](#): Johannesburg, 21-23 March 2018
- [Power & Electricity World Africa 2018](#): Johannesburg, 27-28 March 2018
- [A-OSH Expo](#) – Africa's occupational safety & health trade exhibition: Johannesburg, 22 - 24 May 2018

- [SA GeoTech 2018](#): Ekurhuleni, 28-30 May 2018
- [7th International Conference on Engineering Mathematics and Physics](#) (annual research conference): Prague, Czech Republic, June 15-18, 2018
- [Manufacturing Indaba](#): Johannesburg, 19-20 June 2018



- The [Institute of Municipal Engineering of Southern Africa \(IMESA\)](#) promotes the interests of municipal engineers and their profession. It's a platform for the exchange of ideas and viewpoints on all aspects of municipal engineering with the aim of expanding the knowledge and best practices in all Local Government municipalities. It has grown to represent over 1000 individual members and a plethora of companies involved in the field of municipal engineering and the built environment, as well as representing several Southern African countries. It offers [training](#), [conferences](#), [bursaries](#) and more.
- The [Geo-Information Society of South Africa \(GISSA\)](#) represents the Geo-Information community in South Africa as a national, unified, representative body to promote and protect the interests of its members on all forums. It provides information on [events and training](#), [news](#) including reports, information on [government](#) and [standards](#) related topics, [GIS education](#), and more.
- [Youth must lead the science revolution](#) (SAnews)
- [Girls streaks ahead boys in the education stakes, say SA researchers](#) (Times Live)
- [Foundation phase crucial for improved literacy levels](#) (SAnews)



Universities

- [Avarice: Signs of threats to credible higher education?](#) (SAJS)
- [Q&A: Africa needs to lead on the 'quantum revolution'](#) (SciDevNet)
- [Universities SA decries erosion of academic research in South Africa](#) (Business Day)

- [Insect science: the need for more attention in Africa](#) (SciDevNet)

Industry development

- [Minister opens nominations for new NACI members](#) (ITWeb)
- [Supporting the Sustainable Development Goals: A Guide for Merit-Based Academies](#) (InterAcademy Council)
- [Promoting an environment of innovation: A university scientist's view](#) (SAJS)
- [India-South Africa Joint Grassroots Innovation Call 2017 "A call for novel, grassroots innovations with potential for social dissemination and commercialization"](#) (DST)
- [CSIR Nanotech Centre celebrates 10 years of ground-breaking research](#) (SAnews)
- [iThemba LABS and INSTN Establish SA Institute for Nuclear Technology and Sciences](#) (NRF)
- [R32bn invested in SA's research and development](#) (ITWeb)
- [Bibliometric analysis of the development of nanoscience research in South Africa](#) (SAJS)
- [Engineering research in Africa is growing but it's still a patchy picture](#) (The Conversation)
- [SA slides down World Talent Ranking](#) (Business Day)
- [SFSA Science Diplomacy Award for SGCI](#) (NRF)
- [Science's credibility crisis: why it will get worse before it can get better](#) (The Conversation)

Civil society

- [2017 State of Civil Society Report](#) (CIVICUS)

Medicine and health

- [Score4Life most successful intervention in identifying HIV positive men](#) (saNGOnet)
- [South Africa's twin malnutrition challenges: hunger and obesity](#) (The Conversation)
- [Johnson & Johnson and Partners Announce First Efficacy Study for Investigational Mosaic HIV-1 Preventive Vaccine](#) (Johnson & Johnson) and [Public-private partnership begins HIV vaccine clinical trial in Sub-Saharan Africa](#) (MRC)
- [Essential Science: Jellyfish inspired electronic skin](#) (Digital journal)
- [We have designed a tool to track HIV infection rates cheaply and accurately](#) (The Conversation)
- [Diabetes treatment goals still suboptimal](#) (BizCommunity)
- [Diabetes is growing fastest in Africa, and SA is largely responsible](#) (Business Day)
- [South Africa still has four critical gaps to fill before it sees the end of AIDS](#) (The Conversation)

- [New ARV drugs, early diagnosis key to beating AIDS epidemic: UNAIDS](#) (polity.org)
- [Latest accreditations of hospitals and clinics from the Council for Health Service Accreditation of Southern Africa](#) (BizCommunity)
- [One year in: lessons on rolling out an HIV prevention pill in South Africa](#) (The Conversation)
- [HIV prevention needs of male-male partnerships study conducted by the HSRC](#) (HSRC)

Engineering

- [Pure platinum used in 3D printing](#) (BizCommunity)
- [Decolonising engineering: The importance of technical experts who are embedded in a society](#) (Business Day)
- [Report: Governments own most African infrastructure projects](#) (BizCommunity)

Space science and astronomy

- [MeerKAT ready to go live by March](#) (ITWeb)
- [MeerKAT construction recognised by industry at 2017 Logistics Achiever Awards](#) (SKA Africa)
- [Telescopes in southern Africa will peel back the universe's secrets from 2018](#) (The Conversation)
- [Why SA's monitoring what the weather in space is like](#) (Times Live)

Ecology

- [Here's what the science says about animal sentience](#) (The Conversation)
- [Creative management of grazing through the use small fires](#) (phys.org)
- [Decline in insects not to be taken lightly](#) (Business Day)
- [Why a proper record of birds in Africa is so important – for Europe](#) (The Conversation)
- [Scientists team up on study to save endangered African Penguins](#) (phys.org)
- [Fynbos-monitoring tool beats a trail for fire-prone areas](#) (Business Day)
- [Felling pines: Doing it sooner rather than later is better for fynbos](#) (phys.org)

Palaeontology and archaeology

- [Oldest hominid fossil 'Little Foot' unveiled – Wits](#) (polity.org)
- [Ancient sea reptiles have similar inner ears to whales and crocs, Wits scientists find](#) (Business Day)

Environment, climate change and energy

- [DNA kit set to boost fight against wildlife crime](#) (SAnews)
- [The renewable energy, new coal and gas-to-power IPP programmes in SA – quo vadis?](#) (ee publishers)

- [How barcoding is helping South Africa track its precious pollinators](#) (The Conversation)
- [Satellite images show extent of air pollution worldwide](#) (phys.org)
- [Water resource monitoring via satellite](#) (ee publishers)
- [SA Agulhas II sets sail for the 57th Antarctica expedition](#) (SAnews)
- [How the world needs to change as regions get drier](#) (The Conversation)
- [Research progress in effective and affordable treatment of mine wastewater](#) (CSIR)
- [Citizen science: how ordinary people can guard Cape Town's biodiversity](#) (The Conversation)
- [Cape Town makes treated wastewater available to businesses](#) (infrastructurene.ws)
- [Scientists sound warning over pollutants in treated sea water](#) (Times Live)
- [Collective impact of solar and wind power being studied in SA](#) (Business Day)
- [Plastic recycling figures continue to climb](#) (infrastructurene.ws)
- [SA's KaXu Solar One wins prestigious UN climate change award at COP23](#) (Business Day)
- [Ethekwini to roll out solar water heater project](#) (infrastructurene.ws)
- [SEFA backs development of local biomass-to-power plant](#) (infrastructurene.ws)
- [African Union Commission Awards Thirteen Consortia of Institutions to Implement the GMES and Africa Support Programme](#) (African Union)
- [Know where your waste goes: Highlighting the waste hierarchy](#) (infrastructurene.ws)

Agriculture

- [New database to help countries manage their animal genetic resources](#) (BizCommunity)
- [ASSAf Study on Revitalising Agricultural Education and Training in South Africa](#) (AASAf)
- [Global Soil Organic Carbon Map a powerful tool for sustainable agriculture, climate change mitigation](#) (BizCommunity)
- [Who knew pee was valuable?](#) (BizCommunity)

Open data

- [Improving agriculture and nutrition with open data](#) (eldis.org)
- [When there was no list of free abortion clinics, we made our own. Here's how](#) (Bhekisisa)
- [Africa must keep its rich, valuable data safe from exploitation](#) (The Conversation)

Technology

- [Cape Town residents to track water use online](#) (ITWeb)

- [How a rural community built South Africa's first ISP owned and run by a cooperative](#) (The Conversation)
- [New app to diagnose crop diseases, alert smallholders](#) (SciDevNet)
- [Lancet pilots paperless patient intake app](#) (BizCommunity)

Science communication and teaching

- [In the footsteps of Einstein, Sagan and Barnard: Identifying South Africa's most visible scientists](#) (SAJS)



- [Scientists win U.N. data prize for monitoring threats to South African biodiversity hotspot](#) (University at Buffalo)
- [Celebrating Black Excellence in STI](#) hosted by the Black Science Technology Engineering Professionals (BSTEP) (DST)
- [ASSAf Inaugurates New Members](#) (ASSAf)
- [Farming innovation wins top cleantech award](#) (DST)
- [Young trailblazer teaches physics in Carnarvon](#) (SAnews)
- [Hortgro Science Awards Researchers](#) (Hartgro)
- [8th L'oréal-Unesco for women in science regional programme honours young scientists from across Africa](#) (DST)
- [ASSAf Recognises SKA Leader with Gold Medal](#) (ASSAf)
- [Mintek wins Top Performing Public Sector Award](#) (Mintek)
- [This farmer's prize-winning feed is not for the birds](#) (Times Live)
- Dev Mamabolo, who was in the NSTF's first group of volunteers from 2007 to 2008, has won a [South African Men of the Year Award for Science and Technology](#).

Please forward this e-mail to your colleagues, business contacts and all interested persons!

Send us your news

The NSTF invites all our members, as well as all SET and innovation role players, to send us information on meetings, conferences and activities of interest to the broader S&T community. Please send us your news by the 20th of the month, for distribution at the beginning of the following month, to

enquiries@nstf.co.za

Feedback

If you have any comments or suggestions on how we can improve this newsletter, please e-mail the NSTF Secretariat at enquiries@nstf.co.za

About the NSTF

The National Science and Technology Forum (NSTF), established in 1995, is a broadly-representative stakeholder body for all SET and innovation organisations in South Africa, which seeks to influence policy formulation and delivery.

The NSTF-South32 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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