



## Message from NSTF Executive Director

The next NSTF [discussion forum](#) of 2016 will take place around end-September. Appropriately, the event will be aimed at facilitating exchanges and solution-driven deliberations around the water crisis in South Africa and the shortage of scarce skills in the water sector. We hope to see as many of our members and science, engineering and technology (SET) and innovation stakeholders there as possible to ensure inclusive and meaningful discussions and a collaborative drive for change. See the news item below for more information.



## NSTF News

### Annual Science Councils Symposium September 2016: SA's water crisis

The World Economic Forum's '2015 Global Risk Report' has named water crises the world's greatest risk. SA in turn faces serious water challenges for a range of reasons related to infrastructure, as well as demand and supply. Moreover, the sector

suffers from critical scarce skills shortages impacting service delivery. Join the discussions at the upcoming [NSTF Science Councils Symposium](#) and help to formulate a response, and influence policy-makers in the sector. Watch your mailbox for the invitation; also [subscribe](#) your colleagues and other stakeholders to ensure they receive invitations.

## **Getting to know the work of the 2015/2016 NSTF-South32 Award winners: Prof. Dave Berger**

The maize seed market in SA is estimated at R900-million per year. This provides some idea of the importance of Prof Berger's work in the department of plant and soil sciences at the University of Pretoria. Berger is pioneering crop biotechnology research for food security in South Africa and focuses on the genetics of how crops interact with pathogens. He won an [NSTF-South32 Award](#) for his lifetime contribution to SET in crop science and food security in honour of the UN's 2016 International Year of Pulses. Watch him discussing his work live on [ANN7 and the 'Groot Ontbyt' TV show](#). Also read the full [Mail & Guardian article](#) about Berger's research.

## **Share 'n Dare programme update: Engaging youth and communities through science**

The NSTF [Share 'n Dare programme](#) forms part of the [NSTF-South32 Awards](#) and provides a platform for award winners to act as role models and ambassadors for SET and innovation. [Read more](#) about the recent activities of these inspiring experts.

## **Brilliants 2015/2016: Meet our future innovators**

The NSTF [Brilliants Programme](#), sponsored again this year by the Department of Science and Technology, recognises 18 first-year students (a male and female from each province) studying in the science, medicine and engineering fields, who had received top marks in mathematics and physical science in the National Senior Certificate Examinations last year. This month we introduce you to [Nicola van den Berg](#) from Gauteng, who is studying BSc (Genetics)

at the University of Pretoria, and the Northern Cape's [Thiven Padayachy](#), a medical student at Stellenbosch University.



## SET Policy News

### Featured SET policy: Draft Policy on Building an Effective and Integrated Career Development Services System for SA (June 2016)

In February 2014 Cabinet approved the development of a National Career Development Services policy, implementation strategy and consultation process across all spheres of government. The aim of the draft policy is to establish “a coordinated career development service to ensure that youth, students, under-employed workers and unemployed citizens have access to lifelong, quality career information and career services to enable them to make better and more informed career choices.” This will in turn “deliver higher levels of employment and help to increase sustainable economic growth in the country”. [Read more](#)

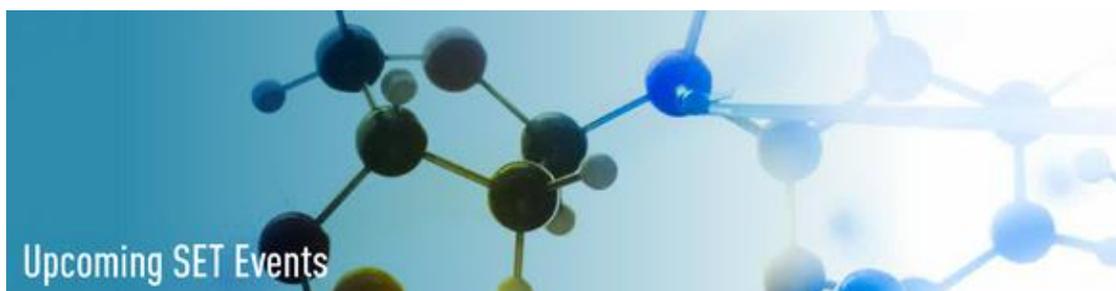
### Other SET-related policies currently open for public comment

- [General and Further Education and Training Quality Assurance Act: Nominations of persons to serve as members on fourth Umalusi Council for remaining period until 7 June 2018: Application invited](#) (Comments by 12 Aug 2016)
- [Architectural Profession Act: Application to serve on nomination panel of South African Council for Architectural Profession: Nominations invited](#) (Comments by 14 Aug 2016)

- [Use of Official Languages Act: Statistics South Africa proposed Language Policy: Draft](#) (Comments by 22 Aug 2016)
- [Strategy to address air pollution in dense low-income settlements](#) (Comments by 24 Aug 2016)
- [National Water Act: Draft Policy on Sustainable Hydropower Generation](#) (Comments by 8 Sep 2016)

## Other SET-related policy news

- [Recent events show need for nuclear rethink - professor](#) (Engineering News)
- [Eskom letter sends shock waves through private power sector](#) (Engineering News)
- [Scientists need to communicate well with policymakers](#) (Scidev.net)
- [Government needs to be more creative in addressing spatial inequality - Sisulu](#) (Engineering News)
- [Using public-private partnerships for digital solutions to boost vision 2030](#) (itnewsafrika.com)



- [Geomatics Indaba 2016: 12-14 Sept, Gauteng](#)
- [Mathematical Sciences Workshop: 15-16 Sept 2016](#)
- [Celebrating a Centenary of Geography in SA: Stellenbosch, 25-28 Sept 2016](#)

- [9<sup>th</sup> International SA Technology Network Conference: Cape Town, 12-14 Oct 2016](#)
- [27<sup>th</sup> Annual Conference of the Southern African Institute for Industrial Engineering: North West, 27-29 Oct 2016](#)
- [Science Forum SA: Pretoria, 6-7 December 2016](#)
- [1<sup>st</sup> International Conference on Sustainable Materials Processing & Manufacturing: Kruger National Park, 23-25 January 2017](#)



## Engineering

- [Engineering: Nanotechnology could lower road-construction costs](#) (mybroadband)
- [Eskom, local universities sign Phase 2 of Eskom Power Plant Engineering Institute funding agreement](#) (Engineering News)
- [Engineering Council of SA reviews regulatory framework](#) (Engineering News)



- [Read the July/August issue of the SA Journal of Science](#)
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- [A cure for HIV: What science knows and what it doesn't](#) (Polity.org)
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- [S&T can enhance local service delivery in SA](#) (ITNewsAfrica)
  - [Pandor stresses need for continued SA research to help find effective and accessible preventive HIV vaccine](#) (AllAfrica.com)
  - [SA gears up for Habitat III, needs to be active in global new urban agenda](#) (Engineering News)
  - [Centre for High-Performance Computing: Global Grand Challenges through an African lens](#) (hpcwire.com)
  - [ICT skills survey highlights ongoing reality of SA's skills gap](#) (Engineering News)
  - [Severe rate of job losses reflects declining metals and engineering sector](#) (Engineering News)
  - [MeerKAT joins the ranks of the world's great scientific instruments through its First Light image](#) (ska.ac.za)
  - [Gates Foundation to invest \\$U.S.5 billion in Africa](#) (AllAfrica.com)
  - [ICT innovation fails to gain tax incentive traction](#) (ITWeb)

## Environment, Climate Change and Energy

- [Siemens upbeat about SA's gas-to-power renewables potential](#) (Engineering News)
- [SA struggling to manage water crisis – Turton](#) (Engineering News)
- [Precision farming the way to go for Africa](#) (southernafrican.news)
- [Finns unveil acid mine-water fix](#) (Engineering News)

- [Financing and legal frameworks key for successful renewables projects in Africa](#) (Engineering News)
- [Launch of African Marine Waste Network](#) (rnews.co.za)
- [UJ student-designed electrical car in top 15 at Eco Marathon Europe](#) (Engineering News)
- [CSIR to conduct ocean experiment to explore climate sensitivities of southern ocean](#) (Engineering News)
- [Young professionals making steady progress in building black-owned independent power producer](#) (Engineering News)
- [Effects of El Nino on water-reliant power-plant systems](#) (esi-africa.com)
- [New mining research centre established at UP](#) (Mining Review)
- [CSIR to develop high-tech capabilities to support Operation Phakisa](#) (Engineering News)



- [Wits Prof Jill Adler to chair international maths commission](#) (Engineering News)
- [SA scientists share research at global forum](#) (AllAfrica.com)
- [NMMU top achievers honoured](#) (rnews.co.za)

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](mailto: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](mailto: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 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**

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## For more information

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Non Profit Company Registration Number: 2007/029165/08

NPO Registration Number: 92042

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