



## National Science and Technology Forum

S.E.T. for socio-economic growth

### Message from Jansie Niehaus, NSTF Executive Director

I am pleased to announce that we will be launching our new website this week: [www.nstf.org.za](http://www.nstf.org.za). The NSTF's new 'cyber home' will combine the three existing NSTF sites (our main site at [nstf.org.za](http://nstf.org.za), the NSTF Awards website at [nstfawards.org.za](http://nstfawards.org.za) and the science bursary site at [sciencebursaries.org.za](http://sciencebursaries.org.za)) into one streamlined and user-friendly portal. Do visit the site to familiarise yourselves with the content, as well as the resources and opportunities offered.

South Africa will be hosting the 35th 'World Cup of Geosciences', the prestigious [International Geological Congress](#), from 27 August to 4 September 2016. The core topics for the congress are *Geoscience for Society, Fundamental Geoscience and Geoscience in the Economy*. A total of 49 themes covering all disciplines in the geosciences will form the basis of the technical programme. This is the most important activity of the International Union of Geological Sciences and deserving of our support.

Please note that we will continue our series of Policy Briefs in the February 2016 issue of this newsletter.

It has been a long, productive and eventful year, and I am sure all our readers are looking forward to a few weeks of quiet time with their families. I want to thank our members, partners, sponsors and stakeholders for your support during the past year, and wish our readers a safe and relaxed holiday season.

### Last chance to submit nominations: 2015/2016 NSTF Awards, in partnership with South32

Please note that the deadline for the first stage of nomination (identify your candidate and register your nomination) is **12:00 on 9 December 2015**. This year, the Capacity Development Awards include capacity development in engineering. The NSTF is also making a special award for a researcher in crop science and food security this year, in honour of the 2016 International Year of Pulses, as declared by the United Nations. Visit the [Awards](#) section for more information on the nomination process, and to download the registration form.

### Getting to know the winners of the 2014/2015 NSTF Awards, in partnership with South32

This month the spotlight falls on two winners: [Professor Deon de Beer](#) won the award for research leading to innovation, by a team or individual through a corporate organisation, for his work on additive manufacturing. The [Antrum Biotech team](#) won the award for research leading to innovation by a team or individual through an SMME, for the development of an assay designed to provide rapid diagnosis of extra-pulmonary tuberculosis (TB) to reduce morbidity and mortality in TB patients.

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Jansie Niehaus

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The NSTF Science Bursaries Website allows bursary providers to register and upload the bursaries they are offering, with total control over their bursary information. The site also provides career guidance in SETI-related fields, and regularly profiles young SETI achievers, as well as accomplished senior role models in the field.

Do let us know if you are planning a youth outreach event; we will be more than happy to arrange for one of the NSTF-BHP Billiton Award winners to be present at your event.

Contact us at [enquiries@nstf.co.za](mailto:enquiries@nstf.co.za) for more information.

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### **NSTF vacancy: Stakeholder Liaison Officer, Pretoria**

The NSTF has a vacancy for a full-time Stakeholder Liaison Officer on a fixed one-year contract. The successful candidate will be expected to focus on building strong collaborative relations with government officials, key role players and networks to further enhance the NSTF's credibility and influence within the science, engineering, technology and innovation community. Contact [enquiries@nstf.co.za](mailto:enquiries@nstf.co.za) for more information or to submit your CV. The deadline for submissions is Wednesday, **9 December 2015**. Suitable candidates will be contacted for an interview early in 2016.

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### **The NSTF Brilliants Programme: Meet the 2014/15 Brilliants students**

The [NSTF Brilliants Programme](#), sponsored this year by the Department of Science and Technology, recognises 18 first-year students 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 Benedikt Meylahn from the Eastern Cape, and the Northern Cape's Francois Slabber, both of whom are studying mechatronics engineering at Stellenbosch University.

You can also see a photographic report on the Brilliants students' tour, including a visit to the National Laser Centre earlier this year. Find it on [www.nstf.org.za](http://www.nstf.org.za) under [Galleries](#).

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### **Invitation to attend public lecture on photonics by Prof Andrew Forbes: 4 December 2015, Stellenbosch**

Prof Forbes, of the School of Physics at Wits University, will talk about the wonders of light; what we do and don't understand about light; how it has impacted on our daily lives; and how light has driven new paradigms in the way we interact with technologies. This talk forms part of the celebration of the UN's International Year of Light and Light-based Technologies, as well as the NSTF's Share 'n Dare Programme, providing platforms for NSTF Award Winners to interact with South Africa's youth. Prof Forbes won the NSTF 2014/2015 special annual theme award for an exceptional contribution to photonics research. Read more on [www.nstf.org.za](http://www.nstf.org.za), under NSTF News on the homepage.

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### **2014/15 NSTF Annual Report now available**

The [NSTF Annual Report](#) provides feedback on NSTF activities during the 2014/2015 financial year, in line with the organisation's current strategic plan. Activities reported on include contracted projects for the Department of Science and Technology, a series of discussion forums with NSTF members and other stakeholders on relevant issues in science, engineering and technology, as well as innovation, youth interventions, and the annual NSTF Awards process. The NSTF would like to thank all members, partners and sponsors for their contributions, support, input and collaboration.

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### **New NSTF Deputy Chair appointed**

We are pleased to announce that Nirdesh Singh has been appointed the new Deputy Chair of the NSTF Executive Committee. Nirdesh has a degree in chemical engineering from the University of KwaZulu-Natal, and has been employed at Mintek since 2000. He currently serves as manager of Mintek's small-scale mining and beneficiation division. We



welcome Nirdesh to the NSTF Exco and look forward to forging a close working relationship with him.

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### **Introducing the NSTF Awards *Share 'n Dare* outreach programme to the science centre community**

During November, the NSTF, represented by Jansie Niehaus (Executive Director) and Fulufhelo Gelebe (Youth Outreach Officer) had the opportunity to introduce the *Share 'n Dare* programme to the science centre community at the 17th conference of the Southern African Association of Science and Technology Centres (SAASTEC). The conference took place in Mahikeng, North West Province, from 16-19 November. Jansie's presentation explained the link between the NSTF Awards and the *Share 'n Dare* programme, the importance of evaluating programme activities, and the results of the evaluation process. Fulufhelo's presentation discussed the main aims of the initiative, the different mechanisms used to reach various audiences and the importance of collaboration by the science centre community. These presentations will be loaded onto [www.nstf.org.za](http://www.nstf.org.za) under **NSTF News** on the homepage.

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### **Almost human - the discovery of *Homo naledi***

Prof Lee Berger presented a fascinating talk at the November annual general meeting of the NSTF about his team's recent paleontological discoveries. [Videos](#) of the talk can now be viewed on YouTube.

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### **Closure of NSTF office during December**

Please note that our offices will close on Friday, 11 December 2015, and reopen again on Monday, 4 January 2016.

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### **SET Policy News**

- [Science, technology and innovation key to success of development programmes - Pandor](#) (*AllAfrica.com*)
- [Parliament passes medicines and related substances amendment bill](#). (*Polity.org*)
- [University autonomy vs public accountability in Higher Education Amendment draft bill](#). (*University World News*)
- [Education to get larger slice of 2016 budget pie - Nene](#) (*Polity.org*)
- [Technology Innovation Agency lifts third-party funding 168% in 2014-15](#) (*Engineering News*)
- [Tax commission head urges govt to hold back on carbon](#) (*Polity.org*)
- [Cabinet approves black industrialist policy](#) (*Polity.org*)



### **Energy**

- [DoE satisfied with boost in SA's wind energy](#) (*Engineering News*)
- [DoE confirms fossil fuels to remain key component of energy mix](#) (*Engineering News*)
- [Nuclear advocate urges SA to consider emerging reactor designs](#) (*Engineering News*)

## Upcoming SETI events

- [International Conference on Competitive Manufacturing \(COMA '16\): Stellenbosch, 27-29 January 2016](#)
- [7th International Conference on Mechanical, Industrial, and Manufacturing Technologies: Cape Town, 1-3 February 2016](#)
- [5th International Conference on Information and Industrial Electronics \(ICIIE 2016\): Cape Town, 1-3 February 2016](#)
- [Water Institute of Southern Africa \(WISA\) Biennial Conference: Durban, 15-19 May 2016](#)
- [7th World Nano Conference: Cape Town, 20-22 June 2016](#)
- [International Conference on Mining and Metallurgy: Cape Town, 27-29 June 2016](#)
- [5th International Conference on Agriculture & Horticulture: Cape Town, 27-29 June 2016](#)
- [International Bat Research Conference: Durban, 31 July- 5 August 2016](#)
- [35th International Geological Congress: Cape Town, 27 August-4 Sept 2016](#)



### Send us your news

The NSTF invites you to send us information on news, meetings, conferences and activities of interest to the broader SETI community. The deadline for all items is the 20th of every month, for publication in the NSTF eNews that is distributed at the end of the month. Send your contributions to [enquiries@nstf.co.za](mailto:enquiries@nstf.co.za).

## Community News

### Science

- [New UCT lab to boost development of life-saving medicines](#) (Engineering News)
- [Deal to solve SKA's big data conundrum](#) (IT Web)
- [SA dinosaur that weighed 50% more than T-Rex unveiled at Wits](#) (TimesLive)
- [SA breakthrough for cancer diagnosis](#) (southafrica.info)
- [Parts of southern Africa within reach of eliminating malaria](#) (theconversation.com)
- [Pfizer partners with SA to produce pneumococcal vaccine](#) (Engineering News)



### Engineering, Technology and Manufacturing

- [SA budget not likely to impact metals sector recovery](#) (Engineering News)
- [Gas infrastructure, improved market conditions key to development of fuel-cell industry in SA](#) (Engineering News)
- [Additive manufacturing will bring product power to the individual](#) (Engineering News)
- [Raise your game, Davies tells manufacturers](#) (Engineering News)
- [Top award for SA's first hydrogen fuel cell-powered aircraft](#) (Polity.org)

### Environment, Climate Change and Energy

- [SA 'globally significant' renewables investment destination with \\$11bn under belt](#) (Engineering News)
- [Recognition of water as a critical commodity central to its protection, panel hears](#) (Engineering News)
- [SA drought follows third-driest season in 80 years](#) (Engineering News)
- [SA pressing ahead with four-phase carbon-capture plan](#) (Engineering News)
- [Water crisis in SA reaches breaking point](#) (Polity.org)
- [Climate change: SA working hard behind the scenes](#) (Health24.com)
- [Sir David King discusses UK government's Climate Change Risk Assessment Report](#) (Engineering News)

### Higher Education

- [SA universities must rethink how they retain and nurture young academics](#) (AllAfrica.com)
- [Is SA's research prowess sustainable?](#) (Times Live)
- [Entrepreneurship education for economic renewal](#) (University World News)

### Resources and Opportunities

- [Call for proposals: Horizon2020](#) (pdf file)  
Horizon 2020 (H2020) is the 8th phase of the European Union's Framework Programmes for research and technological development. It aims to support and encourage research in Europe and seeks to implement

the Europe 2020 and Innovation Union strategies. The programme runs from 2014–2020 and has an estimated budget of €80 billion.

**2016 is the International Year of Pulses, as declared by the United Nations.  
This theme will be celebrated by the 2015/2016 NSTF Awards in partnership with South32.**

**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. We require one month's notice to communicate your news to all stakeholders on our database, and publish it in our newsletter. If you have any comments or suggestions on how we can improve this newsletter, please email the NSTF Secretariat at [enquiries@nstf.co.za](mailto:enquiries@nstf.co.za)

**Disclaimer:**

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 Bursaries page on [www.nstf.org.za](http://www.nstf.org.za), has the latest bursaries for science, engineering and related studies - *SET for life!* This exciting web portal is a 'one-stop shop' for learners and students who are interested in pursuing a career in the sciences, engineering or 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. Contact details submitted by individuals for subscription purposes will be treated confidentially.

***Please forward this email to your colleagues, business contacts and all interested persons and help us find and acknowledge the Who's Who in SET in South Africa!***

**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.

**Follow Us On**



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