



Message from Jansie Niehaus, NSTF Executive Director

A country's advancement is inextricably linked to the number of graduates, and especially post-graduates, its higher education system produces. Against the backdrop of nationwide student demonstrations in October, higher education funding was debated in Parliament and in the higher education portfolio committee last week. This is a challenge that impacts all of us in the science, engineering, technology (SET) and innovation community, whether in government, academia or industry. It is hoped that all stakeholders will work together to find urgent and innovative solutions.

Top news at the NSTF this month is the **call for nominations for the 2015/2016 NSTF Awards**. Nominations are invited for candidates to compete for the country's leading SET and innovation awards – the NSTF Awards, in partnership with South32.

In our monthly Policy Brief (see below under **SET Policy News**) we focus on the Mine Health and Safety Amendment Draft Bill, which aims to improve health and safety standards in the industry, reinforce penalties and streamline administrative processes. Some stakeholders have, however, warned that amendments proposed in the draft Bill could result in serious financial repercussions for mining houses and threaten foreign mining investment.

Just a reminder that the **annual general meeting** of members of the NSTF takes place on 13 November 2015 at Emperors Palace in Gauteng (see news item below). We hope to welcome as many of our members as possible at this meeting.

[Annual General Meeting of the NSTF: 13 November 2015, Gauteng](#)

We call on all our members to make a concerted effort to attend this meeting, since we cannot make important decisions without sufficient numbers of representatives present. Our guest speaker, Prof Lee Berger, will talk about his team's recent paleontological discoveries. Watch out for the official invitation, which you will receive later this week. [Click here](#) for more information, and to view the programme.

Nominations for the prestigious 2015/2016 NSTF Awards in partnership with South32 are now open

You can now submit nominations for outstanding contributions to science, engineering and technology (SET) and innovation for your favourite researchers and other SET-related professionals. 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. 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**. [Click here](#) 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: Meet the Biological Control Research Group from Rhodes](#)

Issue: November 2015



Jansie Niehaus

SET Policy news

Upcoming SETI events

Community News

Share your organisation's bursary information -
www.sciencebursaries.org.za - S.E.T.
for life!

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 for more information.

University

In the next instalment of our monthly series introducing the 2014/2015 award winners to our readers, the spotlight falls on the [Biological Control Research Group](#) (BCRG) at the department of zoology and entomology, Rhodes University. Led by Professor Martin Hill, head of entomology at Rhodes University and director of the BCRG, the group won the 2014/2015 NTSF-Green Matter Award for achieving biodiversity conservation, environmental stability and a greener economy. The group's research is aimed at developing cost-effective biological control methods for invasive aquatic plants, with practical implementation in mind. [Click here](#) (mp3 file) to listen to a podcast of Prof Hill discussing his team's research activities.

The NSTF Brilliants Programme – For our future innovators: 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 [Frederik van Heerden](#) (pdf file) from North West, who is studying BSc (Human physiology, genetics and psychology) at the University of Pretoria, and Mpumalanga's [Ria Nkoadima](#) (pdf file), a civil engineering student at the University of the Witwatersrand.

Latest activities: NSTF Awards [Share 'n Dare outreach programme](#)

This programme profiles NSTF award winners as ambassadors and role models of science, engineering and technology. During October, Prof Andrew Forbes, winner of the 2014/2015 NSTF special Annual Theme Award for an exceptional contribution in photonics research, presented talks to learners, students and a public audience. Ms Zorina Dharsey, Director of the Primary Science Programme, which won the 2014/2015 NSTF Award for achievement by an NGO through technology transfer or training activities, spoke to students at the University of the Western Cape on the challenges of the teaching profession. Prof Bob Scholes, winner of the 2014/2015 NSTF Award for individual achievement over a lifetime, presented a talk on climate change at the Sci-Bono Discovery Centre in Johannesburg. [Read more](#) (pdf file).

SET Policy News

[Policy Brief 9/2015: Mine Health and Safety Amendment Draft Bill](#) (pdf file)

The Mine Health and Safety Amendment Draft Bill aims to improve health and safety standards in the mining industry, reinforce penalties and streamline administrative processes. Some stakeholders have, however, warned that amendments proposed in the draft Bill could result in serious financial repercussions for mining houses and threaten foreign mining investment. [Read more](#) (pdf file).

- [SA positions itself to attract research investors](#) (enca.com)
- [Davies calls on manufacturing industry to mitigate challenges](#) (Engineering News)
- [Zuma launches Operation Phakisa to improve education sector through ICT](#) (Engineering News)
- [Department of Science and Technology receives clean audit](#) (AllAfrica.com)
- [New R&D approach required to create sustainable future](#) (Engineering News)

Energy

- [Environmental groups take govt to task over nuclear secrecy](#) (Engineering News)
- [Costs of nuclear remains classified - Treasury](#) (Polity.org)
- [US energy expert urges SA policymakers to cater for disruptive technologies](#) (Engineering News)



Upcoming SETI events

- [Science Forum: South Africa – 2015: Igniting conversations about science: Pretoria, 8-9 December 2015](#)
- [Smart and Sustainable Built Environments: University of Pretoria, 9-11 December 2015](#)
- [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](#)
- [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.

Community News

Science

- [Read the latest issue of getSETgo, the newsletter of the SA Agency for Science and Technology Advancement \(SAASTA\)](#)
- [CSIR celebrates 70 years of research and innovation \(southafrica.info\)](#)
- [HIV vaccine could be a reality soon, say researchers \(Daily Maverick\)](#)
- [SA not lagging behind in space exploration - Sansa \(SABC\)](#)
- [Research agreement between Nestlé, DST, CSIR and ARC results in new healthy noodles \(AllAfrica.com\)](#)



Engineering & Technology

- [Steel and Engineering Industries Federation of Southern Africa calls on companies to enter excellence awards \(Engineering News\)](#)
- [UP pioneering crucial skills needed in local mining industry \(Mining Review\)](#)
- [SA researchers develop hearing-test software \(ecr.co.za\)](#)
- [Housing emerging as key market for SA engineering sector \(Engineering News\)](#)
- [CSIR unveils new pothole-detection solution \(Engineering News\)](#)

Environment, Climate Change and Energy

- [R82m for Umgungundlovu climate-change project \(ecr.co.za\)](#)
- [Spotlight on user-requirements of new National Ocean and Coastal Information Management System \(AllAfrica.com\)](#)
- [Business urged to pay attention to SA's water risks and opportunities \(Engineering News\)](#)
- [African crops, economies at risk as El Nino threatens to scorch and soak \(Polity.org\)](#)
- [Much interest in SA's gas sector, but concern persists \(Engineering News\)](#)
- [SA's power grid needs R15bn boost for new energy production \(Engineering News\)](#)
- [Renewable energy improves SA's water supplies \(Engineering News\)](#)
- [New global study highlights rising competitiveness of wind, solar energy \(Engineering News\)](#)
- [SA plans to build 1,500-MW solar park, expand renewables \(Reuters\)](#)

Higher Education

- [Producing entrepreneurial students and universities \(University World News\)](#)

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.

SET people in the news

- [ASSAf recognises top SA scientists](#) (Engineering News)

What do you [think of this 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

Send us your news

The NSTF invites all our members, as well as all SETI 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. Contact Wilna Eksteen (details below) for more information.

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.

The **National Science and Technology Forum** (NSTF), established in 1995, is a broadly-representative stakeholder body for all SETI 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 SETI.

www.sciencebursaries.org.za - 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.

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



For more information, contact the NSTF Secretariat at:

E-mail: enquiries@nstf.co.za

Tel: 27 12 841 3987

Fax: 27 12 841 3025

Non Profit Company Registration Number: 2007/029165/08

NPO registration nr. 92042

Donor tax exemption for all donations to the NSTF

[Subscribe or Unsubscribe to the Newsletter](#)

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and automatically archived by **Mimecast SA (Pty) Ltd**, an innovator in Software as a Service (SaaS) for business. **Mimecast Unified Email Management™ (UEM)** offers email continuity, security, archiving and compliance with all current legislation. To find out more, [contact Mimecast](#).