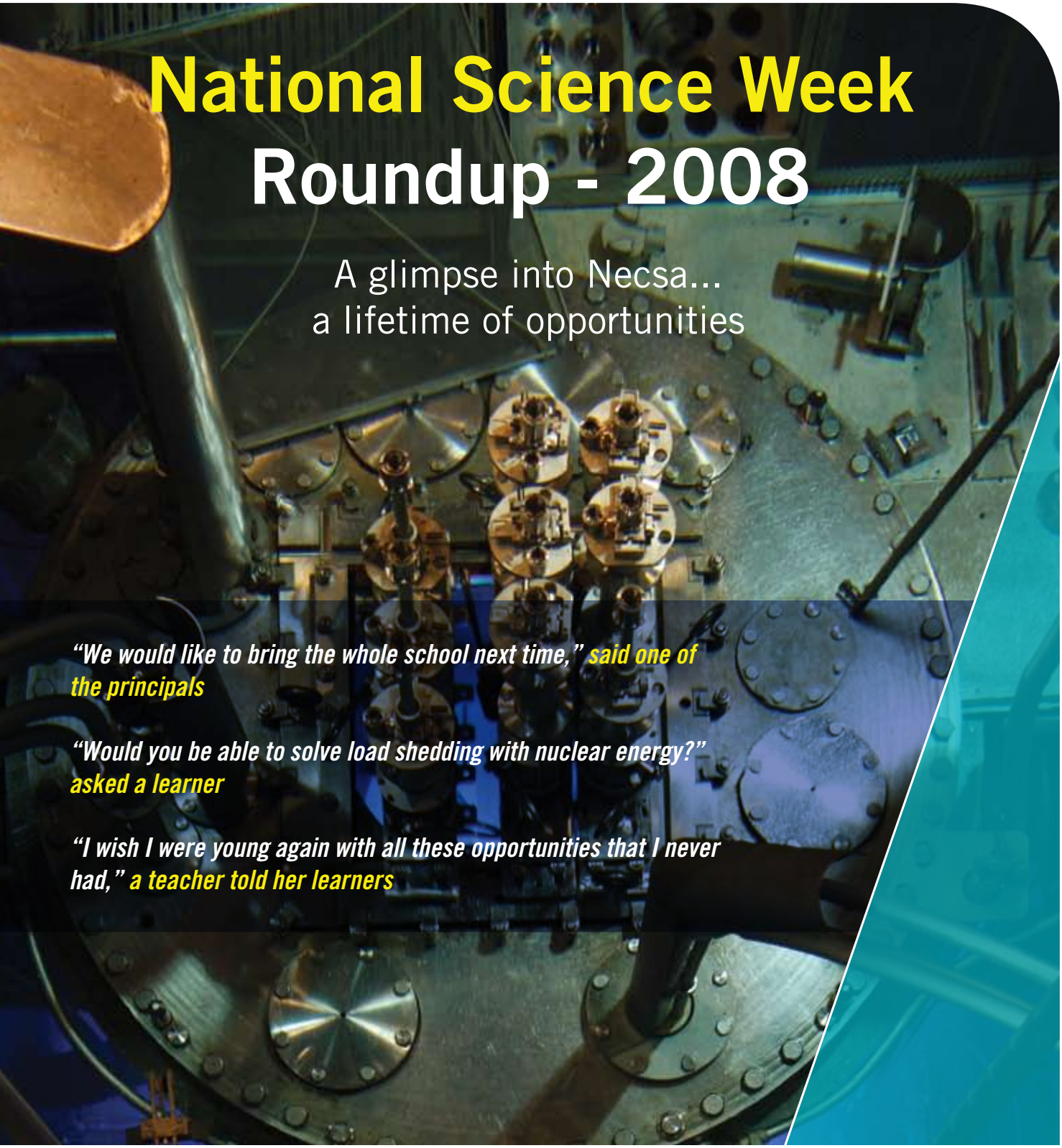

National Science Week Roundup - 2008

A glimpse into Necsa... a lifetime of opportunities

"We would like to bring the whole school next time," said one of the principals

"Would you be able to solve load shedding with nuclear energy?" asked a learner

"I wish I were young again with all these opportunities that I never had," a teacher told her learners

NUKE is NEAT

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We're in your world

Overview of National Science Week …

National Science Week (NSW) is an annual, country-wide event, led by the Department of Science & Technology (DST). Science-based activities involving various stakeholders and/or role players are conducted during the same week in all the nine provinces. NSW highlights the important role science plays in everyday life and encourages the country's youth to enter and remain in science related studies and careers.

This year marks the fourth year of the NSW's five-year plan with the theme "Tomorrow's science and technology is in our youth's hands". For us at Necsa it marks the second year running with our theme "Nuke is Neat".

The Minister of Science and Technology, Mr Mosibudi Mangena, officially launched NSW on 08 May 2008 at the University of North West in Potchefstroom, where he emphasised the importance of the role of the youth in the future of science and technology.

This year, the NSW programme at Necsa ran from 12 to 17 May, providing many exciting opportunities for employees, learners, teachers, parents and the public at large to become involved in science based activities, including among others: science competitions and exhibitions, public talks, lectures, career exhibitions and learner outreach activities as well as tours of Necsa facilities. Here the public had the opportunity to interact with technicians, scientists, and firemen who gave of their valuable time to be part of the event.

The Necsa site at Pelindaba

The top Grade 10 learners from different schools in and around the Pelindaba and Vaalputs areas, were singled out to familiarise themselves with the different career opportunities available in the nuclear sector.

The schools outreach programme in Vaalputs was represented by the following High Schools: Namakwaland, Nababeep, Concordia, Okiep, Steinkopf and Kharkams. A total of 278 learners from these schools spent the afternoon with Necsa at the Kokerboom Motel. Twenty-seven schools from Gauteng, including the PROTEC schools in Atteridgeville, North-West and Limpopo, took part in the programme presented at Pelindaba. During the Schools Careers Days, 1 380 learners, nearly twice as many as in the previous year, attended events. The following schools were present: Brits, DH Peta, Dr WF Nkomo, Edward Phathudi, Mokgakala, Flavius Mareka, Gatang, Hartbeespoort, Himalaya HL Setlenpao, Voortrekkerhoogte,

Waste storage at the Necsa Vaalputs site

Hofmeyr, Holy Trinity, Jafta Mahlangu, North Cliff, Phelindaba, Pretoria-West, Sir John Adams, Wagpos, Matavhela, Tshwelwlang and Mutsoeding.

On 12 and 13 May Necsa employees visited areas at Necsa that they are not familiar with – the SAFARI-1 Reactor, NTP and Emergency Services and on 17 May the general public enjoyed the same opportunity.

Fuel spheres for the Pebble Bed Modular Reactor

Highlights on some of the presentations …

- Andile Ntlokwana, a Quality Controller from the PBMR fuel division addressed learners on the Pelindaba fuel laboratory for making the PBMR fuel. He also outlined the many opportunities awaiting young scientist when the PBMR project comes into full operation. "Spend more time on your mathematics and science," he said.
- Gilbert Lekwe explained what nuclear is all about. "Its one of the cleanest, safest forms of energy. Just remember - it must never go boom!" he joked. "What started as a programme for nuclear weapons has now turned out to save lives through nuclear medicine," he said.
- Zikhona Lose from South African Nuclear Human Asset and Research Programme (SANHARP), explained to learners and teachers that SANHARP awards bursaries to deserving learners, from high school level to university. They also try their level best to place students in industries.
- Aubrey Ntshabele, a young scientist from Research and Development explained what the job of a nuclear waste researcher entails.

- Mosa Rasweswe, from Nuclear Safeguards told learners that she works as a "nuclear police person". She took learners through exactly what energy is, where it comes from and all the available options for us in South Africa.

Demonstration using one of Necsa's fire fighting vehicles

- Anton Gerber of Emergency Services explained the challenge of running towards a fire when everyone else is running away.
- Stanley Mokgehle of the Finance Department shed some light on how he, as an accountant at Necsa, spends his time at work.

The SAFARI-1 research reactor building

"Don't split hair – split an atom," Gerhardt Stander, 'Einstein lookalike', tells his enchanted audience as he takes them from fission to electricity in just a few easy steps

Learners from Springbok look doubtful – can Gilbert Lekwe's simple tin really be used to demonstrate the workings of a steam turbine?

- Elliot Mulane delivered a presentation on Necsa "past present and future".
- Robert Peters from PBMR told visitors about the lead PBMR is taking as far as the generation for the Nuclear Power Plant is concerned.
- The SAFARI-1 research reactor was presented by Koos du Bruyn.
- CEO, Dr Rob Adam, took time out of his busy schedule to welcome visitors to Necsa and gave some encouraging words for them all to take home and think about.

Dr Rob Adam was at hand to share a few words with members of the community

Gerhardt "It must never go boom" Stander asked questions during the 'science quiz' competition and Lucky "Self Esteem" Matlala was at hand to present the prizes

A learner from Springbok tries out a fireman's protective clothing

A learner's hair 'stands on end' as she participates in the static electricity demonstration using the van de Graaff generator

Learners at one of the Necsa Career Days receive their "Nuke is Neat" gift packs

Our key objectives …

Our team at Necsa set out to:

- Promote career awareness among the youth, parents and educators, especially those from previously disadvantaged backgrounds to pursue careers in STEM (science, technology, engineering and mathematics); with more emphasis on nuclear science;
- Contribute to increased participation and performance in STEM;
- Help identify talent and potential;
- Advance science literacy among the youth and the general public;
- Help to demystify the nuclear industry and all its related fields; and
- Make the youth and the general public aware of South Africa's nuclear industry including its history, the role that it plays in their daily lives and the future that it holds for all.

Looking to the future …

The growth in popularity of Necsa's NSW surpassed all expectation. Astute project management and the ability to make last-minute changes to catering and facility requirements ensured that Necsa made provision and accommodated the unprecedented number of guests. Necsa's objectives for this event were achieved in every respect.

These few hours in the lives of each of the learners who attended, present the opportunity of a lifetime – to learn, to grow, to make life changing career decisions and to find that support and encouragement for their decisions is available. In this way, we as Necsa, will achieve our ultimate goal – that of ensuring that there is a future generation of scientists to carry out its valuable work.

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