

South Africa's innovators of tomorrow win big with medals, bursaries and Pi-top Laptops at the annual Eskom Expo for Young Scientists

17 October 2016, Johannesburg, South Africa. "To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science," said the great Albert Einstein. Learning and good grades are necessary, but to create tomorrow's scientists we must help stimulate the creativity of today's youth.

This is one of the goals of the annual Eskom Expo for Young Scientists, which held its national competition in Johannesburg at the Birchwood Conference Centre from 4 to 7 October. RS Components, the global distributor of choice for engineers and suppliers of the revolutionary Raspberry Pi computer board, once again returned to help judge hundreds of entries from across South Africa.

The goal of the Eskom Expo for Young Scientists is to stimulate interest and participation among the youth in fields related to technology, science, mathematics, engineering and innovation. Thirty five regional chapters of the expo are held across the country with 20 000 projects being submitted this year. The winners from the preliminary rounds go on to represent their regions and schools at the national competition, endorsed by the Departments of Basic Education, Science & Technology and Public Enterprises.

"Technology and innovation hold the promise of creating a better future for everyone," says Mellisa Govender, Head of Marketing for RS Components South Africa. "But such things do not happen by themselves. We need to create the opportunities and platforms for young inventors and scientists to showcase their ability, learn from their peers and enhance their knowledge. We're developing the next generation of researchers, scientists, engineers, educators and entrepreneurs who will make a difference in South Africa and the world, which is why the Eskom Expo is such an important event for our country."

More than 550 students attended the competition, showcasing new ideas around science, technology and addressing the challenges of tomorrow. Projects included creating electricity from bacteria, a stability harness to assist cerebral palsy children at school, a tool for visually impaired learners to study trigonometry, recharging batteries by walking, and a low cost air conditioning system for informal settlements.

Past winners have gone on to do great things and change many lives. Last year's winner, Gabriella Fedetto, devised a system that helps Alzheimer's patients remember their medication. In the year prior to that, Nondumiso Mthembu's Ceater Stove showed how to build a vastly improved anthracite stove ideal for rural areas. Siyabulela Xuza, a past winner with a special formulation for rocket fuel, went on to win a Harvard Scholarship. Each year's winners are interviewed to interrogate their understanding of their project as well as their readiness to compete at international science fairs.

Participants stood to win a number of prizes, including gold, silver and bronze medals, bursaries and special awards. As one of the sponsors, RS Components provided three pi-top laptops which are powered by the Raspberry Pi computer board at the Hans Van Der Byl Special Awards. The pi-top range represents a new era in educational technology and will help make STEM subjects accessible to all.

The pi-top 'build your own laptop' kit, offers opportunities in the educational and maker arena by helping users to 'learn, play and create'. The pi-top concept is essentially a Raspberry Pi powered laptop that is ideal for students to learn about programming, computing and hardware creation including electronics fabrication. It also teaches students transferable skills that will help them to create their own hacker and maker hardware projects. With no need for a soldering iron, the pi-top concept allows users to quickly start to experiment with electronics, create PCBs and produce 3D printing projects such as a pi-top case.

This year's winners of the special awards that walked away with the pi-top prizes were:

Matthieu Louis Arthur (Pretoria Boys High School) for his mobile suitcase/baggage security device; James Manelisi Silinda (Steenbok High School) for his innovative shopping trolley solution that reduces queues and Christopher Colin Baumgart (Hoerskool Waterkloof) for his mobile app that regulates your mobile phone call time.

The pi-top range, Raspberry Pi boards and accessories, are all available at za.rs-online.com/raspberrypi.