

Building an Innovation Economy for South Africa



South Africa has the talent and ideas to compete globally, but too many innovations fail to reach the market. At the inaugural Science, Technology and Innovation Public Lecture, leaders from government, academia and business explored how stronger partnerships can help turn research into businesses, create jobs and shape the country's future.

By Amahle Banda

South Africa has never struggled to come up with good ideas. Every year, researchers, scientists and entrepreneurs develop innovations with the potential to improve lives, grow industries and create jobs. The challenge has always been to ensure those ideas do not stop at the research stage but become products, businesses, and opportunities that benefit the country.

That was the focus of the inaugural Science, Technology and Innovation (ST&I) Public Lecture, in partnership with the Department of Science, Technology and Innovation (DSTI) and the Mail & Guardian. The occasion also marked the official launch of the ST&I Business Forum, bringing together leaders from government, academia, business and industry to discuss how South Africa can strengthen its innovation ecosystem and create better pathways for research to reach the market. Although each speaker approached the discussion from a different perspective, they all returned to one simple idea - South Africa cannot change the past, but it can shape the future.

That message came into focus through the story of the Joule electric vehicle. The locally developed electric car was once celebrated as proof that South Africa could compete with the world's best in innovation. Yet despite attracting international attention, the project failed to secure the long-term support it needed to succeed commercially.

Rather than describing the Joule as a failure, speakers encouraged delegates to see it as a lesson. The country has produced many world-class ideas over the years. The real challenge is making sure that the next generation of innovators receives the investment, partnerships and policy support needed to succeed.

For Professor Rodney Priestley of Princeton University, innovation begins with collaboration. He spoke about the importance of bringing together different scientific disciplines and different ways of thinking to solve today's challenges. He also highlighted the African diaspora as an important source of expertise, investment and international partnerships that can help strengthen innovation across the continent.

The conversation was not only about producing new knowledge but also about creating an environment where that knowledge can grow.



Guest speakers at the inaugural Science, Technology and Innovation (ST&I) Business Forum, where leaders from government, academia and industry gathered to discuss strengthening South Africa's innovation ecosystem.

There was a repeated emphasis on the need for stronger partnerships among government, universities, businesses, and investors, arguing that innovation thrives when these sectors work together rather than in isolation.

Minister of Science, Technology and Innovation, Prof. Blade Nzimande, echoed this message, saying South Africa has an opportunity to learn from its past while building a stronger future. He argued that innovation should not remain inside laboratories and research institutions but should become products and industries that contribute to economic growth. "You cannot industrialise without innovation; simi-

larly, you cannot innovate without industrialisation," he said.

Drawing on Sweden's experience, Lena Miranda, Chief Executive Officer of Linköping Science Park, explained that successful innovation depends on long-term partnerships between government, universities and business. Public investment, she said, helps reduce risk and gives companies the confidence to invest in new ideas. Those partnerships have allowed Sweden to build an innovation ecosystem that continues to attract investment and create new industries.

The discussion also highlighted the important role that business plays in advancing innovation beyond the lab.

Dr Stavros Nicolaou of Aspen Pharmacare highlighted that South Africa already has the scientific expertise needed to compete globally in areas such as pharmaceuticals, biotechnology and advanced manufacturing. However, turning that expertise into successful industries requires supportive policies, investment and regulatory systems that allow businesses to innovate with confidence.

Dr Sybil Seoka brought the conversation back to the people innovation is meant to serve. Whether developing new medical technologies or improving everyday healthcare services, she argued that innovation creates value when it solves real problems. She also stressed the importance of supporting entrepreneurs and small businesses, noting that unnecessary barriers often make it difficult for innovators to grow their ideas into successful enterprises.

One of the strengths of the discussion was that it brought together people who do not always share the same platform. Researchers spoke about discovery, government focused on policy, business leaders highlighted investment, while international experts shared lessons from countries that have successfully built innovation economies. Although their perspectives differed, they pointed towards the same goal.

That goal is not simply to

produce more research. It is to create an environment where ideas can move from the laboratory into society, where they become businesses, create employment and solve real challenges.

For South Africa, this matters far beyond the science community. It matters to entrepreneurs looking to build the next successful company, to investors seeking opportunities in local innovation, and to young graduates hoping to work in industries that did not exist a generation ago. It also matters to communities that stand to benefit from better healthcare, cleaner energy, improved technology and a stronger economy.

The inaugural ST&I Public Lecture was therefore about more than science. It was about the country's future. The conversations made it clear that South Africa already has the talent, knowledge and ambition to compete on the global stage. What it needs now is greater collaboration, stronger investment and the confidence to back its own ideas.

The country cannot change the opportunities it has missed. But if the conversations started at this inaugural public lecture lead to action, South Africa's next generation of innovators may be remembered not for what they could have achieved, but for the industries they built, the jobs they created and the lives they changed.