

From VISTA to BRICS – opportunities for innovation?



In 2010, South Africa was invited to join the BRIC (Brazil, Russia, India and China) group of countries as a member. The invitation raised a spectrum of comments, some for and some against it. For South Africa, however, it was an elevation from the VISTA (Vietnam, Indonesia, South Africa, Turkey and Argentina) group of countries to the higher ranked BRICS (Brazil, Russia, India, China and South Africa) group. An interesting question is, of course, what opportunities the new elevated status could bring for South Africa, especially from a science and technology point of view.

In their criticism of the BRICS grouping in general, critics raised issues such as divergence in the goals of BRICS member countries, large differences in the size of their economies and economic performance, established networks with G7 countries that were too strong, and so forth. For South Africa, however, it was an opportunity to become part of a huge economic power block. It also created an opportunity to act as a representative and link for the sub-Saharan region to the other BRICS member countries.

An important potential benefit of membership is the opportunities that could be created for the development of technological capabilities and skills. Developing countries are characterised by their dependence on foreign technologies and skills. South Africa should therefore make use of opportunities created by the BRICS network to establish new science and technology collaborations.

Long-term economic development usually takes place through a series of strategies, starting with a labour-intensive economy, followed by a product-orientated economy and finally an innovation-driven economy. Strong technological capabilities and skills are important inputs to this economic growth strategy and South Africa should use its BRICS networks to enhance this growth process.

The University of Pretoria launched its Future Africa Initiative with the aim of playing an important role in the further development and strengthening of the region. Different faculties at the University initiated projects and programmes

relevant to the needs of the region. From a science and engineering point of view, researchers at the University of Pretoria have much to bring to the table.

In this issue of *Innovate*, you will find interesting examples of research being conducted at the University. This research is not only highly relevant to the needs of our own region, but is also of international importance. There are contributions on cochlear implants, renewable energy, nuclear energy and so forth. In fact, there are quite a number of interesting contributions on the University's energy research projects. Some other fascinating articles examine the search for Noah's Ark and the roots of industrial engineering. I trust you will enjoy these contributions.

And on a final note: After 13 years as Dean of the Faculty of Engineering, Built Environment and Information Technology, Prof Roelf Sandenbergh has handed over the reins to his successor, Prof Sunil Maharaj. During his term as Dean, the Faculty has grown from strength to strength, especially in terms of its research output, the expansion of teaching and research facilities, the large number of research chairs, the growing number of publications in accredited journals and conference proceedings, and the development of national and international research networks and collaborations. From the colleagues in the Faculty, we say: "A job well done!" 🍀

Editor
Tinus Pretorius