



## **SOUTH AFRICA AND THE SKA BID**

**Dr. Saleem Badat, Vice-Chancellor of Rhodes University**

South Africa has been awarded joint host country status with Australia for the Square Kilometer Array (SKA), a global scientific enterprise to build a telescope that will be about 50 to 100 times more sensitive than any other radio telescope on earth. Comprising 3000 dish-shaped antennae spread over a wide area, the telescope is being designed to probe the edges of the universe and help scientists answer fundamental questions in astronomy, physics and cosmology, including the nature of dark energy and dark matter.

SKA has the potential to boost the number of Africa's scientists and technicians, and stimulate Africa to play an increasingly important role in the global knowledge economy. In support of its bid, South Africa has already awarded more than 400 grants and bursaries to researchers, and supported almost 100 MSc and PhD students. It has also provided 16 bursaries to students from the rural areas in the Northern Cape province to study technical skills in the areas of welding, plumbing, electrical, bricklaying, carpentry and motor mechanics."

The building the R20-billion project also means that billions of Rands will flow into the local economy. The SKA's construction is scheduled to start in 2016 and it will become fully operational in 2024.

Rhodes played a significant role in South Africa's bid through Professor Justin Jonas, who is the associate director for science and engineering at the SKA. The University already has students on the SKA scholarship in key scarce skills areas such as mathematics and hopes to further support the expansion of South Africa's knowledge economy through the SKA Chair, awarded through the South African Research Chairs Initiative of the Department of Science and Technology. The SKA will significantly support the expansion of South Africa's knowledge economy in general and high-technology industry specifically," said Chamber of Commerce and Industry (SACCI) CEO Neren Rau.

South Africa will build the largest portion of the project in partnership with other African countries, which include Botswana, Ghana, Kenya, Madagascar, Mauritius, Mozambique, Namibia and Zambia, while the rest will be built in Australia. "Developing large-scale astronomy facilities can become a powerful driver of scientific, socio-economic and human capital development throughout the continent of Africa, for the benefit of the world," says Minister of Science and Technology Naledi Pandor. Dr Badat will elaborate on how the collaborative project not only marks a turning point in Africa as a destination for science and engineering but is also a positive step forward in building stronger research and commercial ties in Africa.