

CSIR R&D impresses State President

When visiting the CSIR in March 2007, Mr Thabo Mbeki received a hands-on demonstration of CSIR research that improves the quality of life of South Africans.

Enjoying the CSIR R&D endeavours showcased in the medium speed wind tunnel – Mr Thabo Mbeki; Dr Sibusiso Sibisi, CSIR President and CEO; and Mr Mosibudi Mangena, Minister of Science and Technology

The Presidency stated that “the CSIR visit provides a platform to showcase extraordinary work achieved through joint initiatives with the Department of Science and Technology (DST) and private sector companies, as part of the national effort of achieving sustainable socio-economic development.”

In a meeting at the DST preceding the visit, Mr Mbeki was informed of the improvements the science sector required to ensure that it contributed to the socio-economic development of South Africa. Afterwards, Mr Mosibudi Mangena, Minister of Science and Technology, said these improvements included the need to develop more scientists – some 60 000 in five years. He said for that to be realised, more bursaries had to be made available and that tertiary education institutions had to be more aggressive in recruiting Honours, Masters and PhD students.

A major testing facility at the CSIR, the medium speed wind tunnel is one of the best equipped and most sophisticated tunnels of its kind in the country and was selected as the venue for Mr Mbeki’s on-site visit. The wind tunnel is a research tool developed to assist with studying the effects of air moving over or around solid objects moving at speeds of between Mach 0.2 to Mach 1.4. Air is blown through a duct equipped with instrumentation where models or geometrical shapes are mounted for study. Various tests are conducted, including force measurement, pressure measurement, flutter and dynamic stability, flow visualisation, two-dimensional aerofoil tests, and high angle of attack tests.

CSIR projects showcased included the application of human language technologies, nanotechnology, building and construction, preserving natural resources and the environment, mining, the hydrogen economy and fuel cells, biosciences, materials and manufacturing, and laser technology.

The CSIR Satellite Application Centre prepared two framed satellite images for Mr Mbeki as a souvenir. The one is an image of the Union Buildings taken by a Quickbird satellite, procured as part of a data set for the Gauteng Department of Housing to monitor and evaluate informal settlements in this province. The other image is a 2001 Ortho photo showing his place of birth, Mbewuleni in the Eastern Cape.