

## SIR DAVID ANTHONY KING

Sir David King has been Chief Scientific Adviser to the British Government and Head of the United Kingdom Office of Science and Technology since October 2000. He is the second South African – Sir Solly Zuckerman was the first – and the first chemist to be appointed to this position. In his announcement of the appointment, Prime Minister Tony Blair said: ‘The Chief Scientific Advisor plays a vital role in providing high quality advice to the government. Professor King’s eminent career makes him admirably suited to his new role. He is a first-rate scientist who is highly regarded internationally.’ Sir David received a knighthood in the 2003 New Year’s honours list in recognition of his services to science in government and to chemistry.

Shortly after his appointment as Chief Scientific Adviser Sir David described his position by saying ‘I have a licence to interfere in science wherever it is in government’. He then went on to launch his new career with some spectacular interference when the foot-and-mouth epidemic broke out in the United Kingdom. It fell to him to admit what no one had dared say: that the epidemic was out of control and could cost the country half of its 62 million livestock. By the time he dropped his bombshell enough computer modelling had been done for him to be certain of what the government needed to do to bring the epidemic under control and he survived his baptism of fire with his reputation intact and the reputation of scientific advice in government greatly enhanced. The announcement last year that the UK Government will be doubling its research funding (distributed through Sir David’s office) from £1.45bn to £2.9bn in 2005 is a measure of his success.

David King was born in Durban and received his early education at St John’s College, Johannesburg. He graduated from the University of the Witwatersrand with a first-class BSc Honours degree in 1960 and a PhD in 1964. His outspoken political stand led to his being forced to accelerate completion of his PhD and leave the country on a one-way ticket to the UK.

After a post-doctoral stint at Imperial College, London where he gained unwanted notoriety by blowing the roof of the chemistry building, Sir David took up his first permanent academic appointment as a lecturer in Chemical Physics at the newly founded University of East Anglia. There he was awarded a Doctor of Science degree in 1974.

He was only 34 when he moved to the University of Liverpool where he was appointed Professor of Physical Chemistry and later Head of Department. He left Liverpool in 1988 to become Professor of Physical Chemistry at the University of Cambridge, a position he still holds, and was appointed Head of Department in 1993.

When he took over as Head of Department the Cambridge Chemistry Department was under funded and run down. Within weeks he commissioned an architectural analysis of future needs, proposing a refurbishment and building scheme costing £70m. He lured top industrialists on to his fundraising board and over £50m was raised during his tenure, including a critical £28m that came as part of a joint Government-Wellcome Trust scheme to give the kiss of life to the dilapidated laboratories. Today Cambridge’s Department of Chemistry is a very different place from what it was in

1993, and the department’s research output places it amongst the top three in the world.

In 1995 Sir David became the fourteenth Master of Downing College, shaking up the College finances and initiating a highly successful £12m development campaign. He received a Doctor of Science degree in 1999

Since becoming Chief Scientific Adviser he has retained the research component of his post at Cambridge and he currently heads a group of eleven research fellows and postdoctoral researchers and fourteen PhD students. He will return to full-time research at Cambridge when his five-year appointment ends.

Professor King is a distinguished physical chemist, best known as one of the pioneers of modern experimental and theoretical surface science techniques that are nowadays widely used to improve our understanding of how gas molecules interact with solid surfaces. This research impacts on countless areas of chemical science, from the oxidation of methane for fuels of the future to scanning microscope work that is leading to the new field of nanotechnology and new catalysts for the chemical industry and for reducing pollution. Always an enthusiastic instrument developer, Sir David designed the world’s most sensitive calorimeter for measuring bond energies. This won him international recognition and represents one of his most significant contributions to surface science.

He has published nearly 400 papers in major scientific journals, was elected a Fellow of the Royal Society in 1991 and, in 2002, received the prestigious Royal Society Rumford Medal for his research contributions in chemical physics – only one of many national and international honours bestowed on him in recent years. Also in 2002 he was elected Foreign Fellow of the American Academy of Arts and Sciences.

Sir David’s great love apart from science is painting, and modern art plays an important role in his life. This interest led to an involvement with Liverpool’s Bluecoat Art Gallery and in Cambridge he played an unequivocally successful part in developing Kettle’s Yard, the University’s contemporary art gallery, helping to raise over £600 000 to extend the gallery.

Although he was unable to return to South Africa during the apartheid years, he has visited the country many times since the change of government, *inter alia* in 2000 to receive the South African Institute of Chemistry Catalysis Award and, in 2002 as one of the UK Government’s senior delegates to the Johannesburg World Summit on Sustainable Development.

A scientist’s scientist, he is a principled pragmatist, respectful of public rights and committed to public education, but at the same time a top-flight researcher of uncommon rigour and imagination.

It is with great pride and pleasure that the University honours David Anthony King by awarding him the degree of Doctor of Science *honoris causa*.