# Professor Sir John Meurig Thomas

The degree of Doctor of Science (honoris causa) was conferred upon Professor Sir John Meurig Thomas at the Science ceremony held on 4 November 2005.

**Citation**

Deputy Chancellor,

I present John Meurig Thomas for admission to the degree of Doctor of Science honoris causa.

The life work of Professor Sir John Meurig Thomas traces an astonishing series of achievements in excellence.

From humble origins as a coalminer's son he became Head of the Department of Physical Chemistry in Cambridge, the Director of both The Royal Institution and the associated Davy Faraday Research Laboratories (the oldest continuously operating laboratories in the world), then Master of Peterhouse, Cambridge (the oldest and founding College of Cambridge University) and in doing so laid the foundations for the modern discipline of catalysis.

He was born in Llanelli, South Wales, in 1932 and took his initial degree in The University of Wales, Swansea, before proceeding to Queen Mary College, London, to complete his PhD. For 20 years he taught and researched in The University of Wales, first at Bangor, where he began as an Assistant Lecturer in 1958 and later as Professor and Head of Chemistry in Aberystwyth (1969-1978). Called to the University of Cambridge to succeed Jack Linnett in 1978, he was Head of the Department of Physical Chemistry and Professional Fellow at King's College for 9 years before his appointment as Director of the Royal Institution of Great Britain and Head of the Davy Faraday Laboratory in London, where he continues his research. From 1991 to 1994 he served as Deputy Pro-Chancellor of The University of Wales. In 1993 he was elected Master of Peterhouse, University of Cambridge, the first scientist in the College's 710-year history.

Professor Thomas has long-standing connections to Australia, collaborating with the CSIRO, the Australian National University, Monash and Sydney universities. He gave named lectures at the ANU, Sydney and the Australian Academy, has almost become a regular on Radio National, chaired the international ANU School of Chemistry review panel and gave the opening Plenary at the IUPAC and Chemistry World Conference in Brisbane 2001. But his connections go back further in time, specifically at the University of Sydney. He was an integral part of the "Australian Scientist" scheme run jointly by the Royal Institution and initially Harry Messel, then Max Brennan and finally Lawrence Cram, all from the Physics Department (this involved lecturing, looking after exchange students in London and presenting selected Australian participants to the Queen and Prince Phillip).

When contemplating his work in general, it is necessary to step out of the narrow confines of a particular sub-discipline of catalysis. One must take a more expansive view, because this work is defined not merely by the significance of its considerable impact or its subsequently realized economic value (both of the explicit and implicit nature), which in itself represents outstanding scientific achievement, but it is also defined by the highly innovative nature of the work in combination with the training of scientists and the dissemination and popularisation of science. His ability to enthrall school children, university under- and postgraduates, academicians from the world over and, even, the general public has helped immensely to place the discipline of catalysis on the broadest possible scientific and societal foundations.

He pioneered in-situ studies of heterogeneous catalysts with synchrotron radiation and made many ground-breaking, highly-innovative contributions in the use of solid–state NMR for zeolites (eg Thomas' equation) and in the use of electron microscopy (eg defect-induced reactivity of graphite) in combination with its various associated techniques (electron diffraction, electron-energy-loss spectroscopy and electron tomography).

In summary, we are recognizing a magnificent corpus of pioneering work in the rational design of catalysts and their active sites, based on structural, compositional and performance studies, leading to the foundation of modern heterogeneous catalysis.

Deputy Chancellor, I have the honour to present John Meurig Thomas, chemist, scholar, teacher and science communicator, for admission to the degree of Doctor of Science honoris causa and I invite you to confer the degree upon him.