

James Barber FRS

Ernst chain Professor of biochemistry at Imperial College, London

Professor James Barber graduated in Chemistry from the University of Wales and undertook his Ph.D thesis studies in Biophysics at the University of East Anglia. He is a Fellow of the Royal Society, a Fellow of the Royal Society of Chemistry and a registered Chartered Chemist.

He joined the Academic Staff of Imperial College in 1968 after completing a post-doctoral fellowship as the Unilever European Fellow at the State University of Leiden in The Netherlands. At Imperial College, in 1974 he was made a Reader and five years later promoted to a full Professorship. He was awarded an honorary doctorate by Stockholm University and elected a member of the European Academy 'Academia Europaea' in 1989. He has been Dean of the Royal College of Science at Imperial College and was Head of the Biochemistry Department for 10 years from 1989 to 1999. He occupies the Chair named after the Nobel Laureate Ernst Chain (co-discoverer of Penicillin).

James Barber has published over 400 original research papers and reviews in the field of plant biochemistry, editing 17 specialised books, and was awarded the prestigious Flintoff Medal by the Royal Society of Chemistry in 2002. He was elected a foreign member of the Royal Swedish Academy of Sciences in 2003 and elected a Fellow of the Royal Society in 2005 and has been awarded the 2006 Biochemical Society Novartis medal and prize just one year after receiving the Eni Italgas Prize for Energy and Environment, and finally in 2007 he was assigned the Wheland Medal and Prize from the University of Chicago. He is frequently requested to give lectures both in the UK and overseas which includes a recent invitation to give the 2008 Daniel Arnon Lecture, a prestigious lecture of the University of California at Berkeley.

The core of his research has been to investigate photosynthesis and the functional role of the photosystems with emphasis on their structures. Much of his work has focused on "Photosystem Two", a remarkable biological machine able to use light energy to split water into oxygen reducing equivalents, a reaction upon which we are all dependent