



**DENNIS V. PARKE, PhD, DSc, FRSC, FRCPath, FIBiol, Hon.FRCP,
Doctor Honoris Causa, Medical University of Łódź
1922–2002**

Dennis V. Parke died on 23rd November, 2002 in Guildford, Surrey, U.K.

Born in 1922, he studied medicine and chemistry at the University College, University of London. During the years 1944–1947 he served, as a pathologist, in the Royal Army in India and the Far East. Thereafter, he was employed at Glaxo Laboratories in the fields of biochemistry and experimental medicine. Later, he was appointed Lecturer in the St. Mary's Hospital Medical School, University of London where he worked with Professor R.T. Williams, an outstanding organic chemistry scientist. There he received his PhD and DSc degrees. In 1967, Dennis Parke moved to Guildford, where he was appointed first Professor and head of the Department of Biochemistry, and later took the position of the Dean of the Faculty of Biological and Chemical Sciences, University of Surrey. In 1969, he inaugurated the world first undergraduate and graduate courses in toxicology. He retired in 1990 as Professor Emeritus of Biochemistry at the University of Surrey.

During his work at St. Mary's in London, his research focused primarily on metabolism of organic compounds in experimental animals. His publications refer to over twenty chemicals, some of them fundamental to toxicology, such as benzene, halogenobenzene, nitrobenzene, and aniline. He often resumed his study on some of these chemicals as soon as new techniques allowed for more in-depth approach, as was the case with ^{14}C tracing and isotope dilution technique. Toward the end of his activities at St. Mary's, lasting 18 years, he published "The biochemistry of Foreign Compounds", a textbook still widely used in teaching of toxicology.

In his new biochemical laboratory at the University of Surrey, Guildford, Professor Dennis Parke devoted a great deal of his research to study biochemical mechanisms of metabolism of xenobiotics. His attention was focused on the system of microsomal enzymes and its key factor, cytochrome P-450. Many of his works deal with the inducibility of P-450 and its ontogenetic development in pregnancy, postnatal life and ageing, nutritional status, just to mention a few. Studying the influence of a natural product, safole, on cytochrome P-450, the research team under his leadership was among the first to discover and describe cytochrome P-448. This particular enzyme was found to catalyze the oxygenation of xenobiotics in sterically hindered positions. The activity of this enzyme results in the generation of "active metabolites" capable of reacting with macromolecules and thus initiating radical reactions leading to an oxidative stress. The role of oxidative stress in the pathogenesis of various diseases became one of the latest areas of scientific activity of Professor Parke.

Another major area of his scientific interest were toxicological implications of drug metabolism. This led to the research on the structure-activity-relationship (SAR) with special emphasis on modeling of carcinogenic potential of chemicals.

Professor Parke was the author of over 400 articles, monographs and books. He was the founder, and for many years the editor, of the scientific journal *Xenobiotica*, devoted to the fate of foreign compounds in biological systems.

The granting to Professor Parke of national and international distinctions provides evidence of the international recognition accorded to him for his scientific achievements in biochemistry and toxicology. The Senate of the

Medical University of Łódź honored him with its highest distinction – the title of *Doctor Honoris Causa*.

The scientific and organizational activities of Professor Parke were acknowledged by numerous memberships. At home, he was an Honorary Member of the College of Physician, and the Biochemistry Society, and a Fellow of the Royal Society of Chemists, the Royal Institute of Biology and the Royal College of Pathology. Abroad, he was a Scheel Medalist (Uppsala, Sweden, 1989), an Honorary Member of the Polish Society of Toxicology (1984), an Honorary Fellow of the Polish Society of Occupational Medicine (1984), and an Honorary Member of the Society of Toxicology, USA (1996).

His unique qualifications and span of knowledge has prompted his involvement in a variety of expert bodies. He was a member of the Committee of Safety of Drugs (UK, 1967–1969), the Committee of Safety of Medicines (UK, 1969–1982); an advisor to WHO and FDA (USA) on drug toxicity and safety evaluation, a WHO consultant on industrial toxicology, food toxicology, pesticide toxicity and public health, and an advisor to WHO, NATO and EPA (USA) on environmental toxicology. He was also a member of the Scientific Group on the Methodology of

Safety Evaluation of Chemicals (SGOMSEC) and other international bodies concerned with safety evaluation of drugs and chemicals, especially those working under the International Program of Chemical Safety (IPCS; joint activity of WHO, UNEP and FAO).

While in London, and also in his laboratory in Guildford, Professor Parke hosted several young Polish scientists, who under his guidance studied the methodology of drug metabolism investigation. He visited Poland several times as a guest of the Medical University of Łódź, the Nofer Institute of Occupational Medicine in Łódź, the Polish Society of Toxicology and also as a WHO consultant to the Polish program on chemical safety.

Professor Dennis V. Parke was an active member of the Editorial Board of the *International Journal of Occupational Medicine and Environmental Health*, he was an outstanding contributor to our Journal and a close friend to all of us whom we respected and admired. Professor Parke will be truly missed by his colleagues and by all those who had the pleasure of working with him. He will always remain in our memories and will be remembered by the international scientific community.

Editors