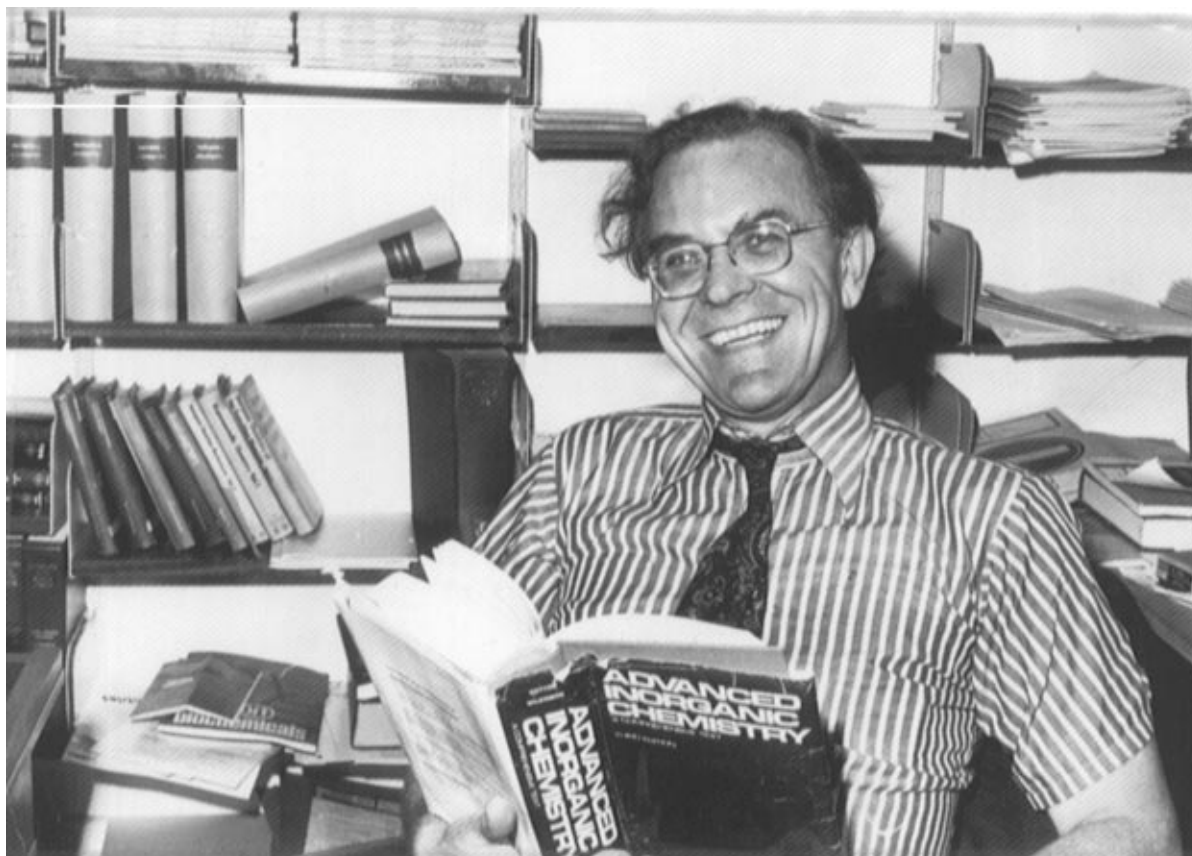


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Sir Geoffrey Wilkinson 1921–1996 IN MEMORIAM

Professor Sir Geoffrey Wilkinson, one of this century's most influential chemists, died suddenly at his home in London on September 26, 1996. He was born on July 14, 1921, at Springside in Yorkshire, England, and after Todmorden Secondary School went on to Imperial College, London, in 1939, subsequently graduating at the head of his class in 1941.

At the height of World War II he made his first crossing of the Atlantic Ocean in 1943 on the Royal Mail Ship *Andes*. Along with the brightest in British science, he was recruited for the Allies nuclear energy project. He worked as a Scientific Officer in the joint U.K./U.S./Canadian atomic energy project at Montreal and at Chalk River until 1946. In such a concentration of talent, many others were subsequently to become famous (and infamous!). In 1946 Wilkinson moved to the West Coast of the United States to join the research group of Professor

Glenn Seaborg at the University of California at Berkeley. He became the first non-American cleared by the United States Atomic Energy Commission for work on the Lawrence Radiation Laboratory, making more new isotopes of the chemical elements than anyone else previously, and probably since.

In 1950 he recrossed the continent and worked on the East Coast at MIT and Harvard between 1950 and 1956. It was these 6 remarkable years that established the foundations for his subsequent works. The remarkable coincidence of both Woodward and Wilkinson at Harvard arriving at the structure of ferrocene in late January 1952 is well-documented. The resulting paper *The Structure of Iron Bis-cyclopentadienyl* is one of the basic cornerstones of organometallic chemistry. Wilkinson and his Harvard group rapidly extended the concept

of the “sandwich” structure with a stream of seminal papers, laying a large part of the basis of transition metal organometallic chemistry.

In 1955 Imperial College invited Wilkinson to return to the then sole established chair of inorganic chemistry in Britain. Thus in January 1956 at the age of 34 he returned to his *Alma Mater* as one of the youngest professors that institution has ever appointed. In London in the 1950s he rapidly enthused a group of co-workers to work with him 6 and often 7 days a week racing to establish the fundamentals of transition metal organometallics. In those days even obtaining a high-resolution NMR spectrum of a compound was a difficult and time-consuming process, involving a hot wire recorder that “melted” waxy black “ink” on the paper to produce a spectrum.

Wilkinson had a close personal relationship with all of his co-workers, and he would visit them regularly at the work bench, especially if something was becoming a “hot” prospect. Although the projects in hand were always aimed at the fundamentals of the subject, his work is an object lesson in getting the basic research right and the commercial advances would follow. He prepared the rhodium phosphine complex later to become known as Wilkinson’s catalyst, which became a major factor in organic synthesis and development work for important pharmaceuticals. This resulted in his tongue-in-cheek entry of “Organic Chemistry” in *International Who’s Who* as one of his “leisure interests”. His discovery of the rhodium catalysts for hydroformylation of olefins to aldehydes and alcohols is now used in modified form on a massive scale, and the income from the patents on these discoveries enabled him to sustain a self-financed research group from his official retirement in 1988 until his death. The applicability of these basic researches earned him the Messel Medal of the Society of Chemistry and Industry.

In 1988 Wilkinson retired from the by-then-named Sir Edward Frankland Chair of Inorganic Chemistry at Imperial College, and moved into the purpose-built Johnson Matthey Laboratories where he continued to research and write until the week of his death.

With one of his former students, F. A. Cotton, was published in 1962 the first edition of *Advanced Inorganic Chemistry*. This pioneering text fundamentally transformed the approach to the teaching of inorganic chemistry worldwide, and one of the last tasks Wilkinson accomplished was the completion of his contribution to the sixth edition of “*Cotton and Wilkinson*”. In 1982 the encyclopaedic nine volume *Comprehensive Organometallic Chemistry* was produced under his inspired editorship, followed in 1995 by the much larger 14 volume supplement set, indicating the increasing pace of development in the subject that he had done so much to inspire and advance.

Wilkinson was elected a Fellow of the Royal Society in 1965 and was awarded the Nobel Prize for Chemistry jointly with E. O. Fischer in 1973. He was knighted in 1976 but never allowed himself to become an “establishment” man. Indeed his passionate concern for and defence of funding for truly curiosity-driven chemical research regularly placed him in conflict with those in authority who pressed for more and more “mission-oriented” research programs.

His memory is secure not only for his own truly remarkable corpus of scientific discovery, but also now by the works of the great army of his scientific children, grandchildren, and great-grandchildren and their successors across all continents.

Eddie Abel

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