



Curriculum Vitae Professor Dr Lord George Porter

Name: Sir George Porter, Baron of Luddenham

Life Dates: 6 December 1920 - 31 August 2002



George Porter was a British chemist. He contributed work in the field of photochemistry and was concerned with reactions that proceeded very rapidly. In 1967, he was awarded the Nobel Prize in Chemistry together with the German Manfred Eigen and the British Ronald George Wreyford Norrish for the development of new experimental methods to determine the rate of extremely fast chemical reactions.

Academic and Professional Career

George Porter began studying chemistry at the University of Leeds in 1938 and graduated in 1941. He then served in the Royal Naval Reserve, a volunteer reserve unit of the British Navy. After the Second World War, he studied at Emmanuel College, University of Cambridge, from 1945 to 1949. After graduating, he worked there in physical chemistry. Between 1954 and 1955, he was Assistant Director of the British Rayon Research Association. In 1955 he went to Sheffield, where he was appointed Professor of Physical Chemistry.

Between 1963 and 1966, George Porter was head of the Department of Chemistry at the University of Sheffield. In 1966, he became Fullerian Professor of Chemistry and Director of the Royal Institution of Great Britain. He remained there until 1987. Subsequently, he was appointed Professor of Photochemistry in 1987 and Chairman of the Centre for Photomolecular Sciences at Imperial College in London in 1990. From 1986 to 1995, he was also Chancellor of the University of Leicester. The chemistry building there was named after him in 2001 (George Porter Building). George Porter was President of the British Chemical Society from 1970 to 1972, of the British Association for the Advancement of Science from 1985 to 1986 and of the Royal Society London from 1985 to 1990.

Nobel Prize in Chemistry 1967

Ronald George Wreyford Norrish had already begun studying photochemical reactions in the early 1920s. In 1947, George Porter joined Norrish's laboratory as a doctoral student. The topic he had chosen for his doctoral thesis was the study of fast chemical reactions triggered by a perturbation of equilibrium using very short energy pulses.

Norrish and Porter jointly developed a method to measure such reactions that later became known as flash-photolysis. Such reactions are extremely short, lasting only a millisecond or less. To be able to measure them, a reaction is triggered in a chemical system utilizing a flash of light. The absorption spectrum of the reaction intermediates, which are usually extremely short-lived, can then be shown by a second, time-delayed flash. By changing the time between the two flashes, the kinetics of the reaction process could be investigated.

In the following years, George Porter used the flash-photolysis technique to study short-lived particles (radicals and molecules in triplet states) that mainly occur in photochemical reactions. For this work, he was awarded the Nobel Prize in Chemistry in 1967, together with Ronald George Wreyford Norrish and Manfred Eigen.

George Porter's work was of fundamental importance for the development of modern chemistry and also for molecular biology. Among other things, they permitted the investigation of the primary processes taking place in plant photosynthesis.

Honours and Awarded Memberships

George Porter received numerous other awards, including the Corday-Morgan Prize (1955), Silvanus Thompson Medal (1968), Davy Medal of the Royal Society (1971), Kalinga Prize of UNESCO and Jagadis Chandra Bose Medal (both 1977), Rumford Medal of the Royal Society (1978), Faraday Medal (1980), Longstaff Prize (1981), Melchett Medal (1987), Porter Medal for Photochemistry (1988), Order of Merit (1989), Life Peerage as Baron Porter of Luddenham (1990), Faraday Prize (1991) and the Copley Medal of the Royal Society London (1992). In addition, Porter was appointed a Knight of the Order of the Thistle in 1972.

He was also a member of scientific associations, including the Royal Society London (1960), New York Academy of Sciences (1968), German Academy of Natural Sciences Leopoldina (1970), Pontifical Academy of Sciences as well as the US National Academy of Sciences, Akademie der Wissenschaften zu Göttingen (all 1974), La Real Academia de Ciencias (1978), American Academy of Arts and Sciences (1979) and the American Philosophical Society (1986).

Personal Details

George Porter was born the son of construction worker John Smith Porter and his wife Alice Ann Roebuck on 6 December 1920 in Stainforth, Yorkshire, UK. He attended Thorne Grammar School

from 1931 to 1938. On 25 August 1949 he married Stella Jean Brooke. The couple had two sons, John (1952) and Andrew Christopher George (1955).

George Porter was passionate about the communication of scientific issues to the public. He supported the BBC television series *Laws of Disorder* (1965/66) and *Time Machines* (1969/70).

George Porter passed away on 31 August 2002 in Canterbury, UK.