



## Alfred Ubbelohde



Antwerp, Belgium, 14 Dec. 1907 - 7 Jan. 1988

**Title** Professor of Thermodynamics, Imperial College, London, UK

**Nomination** 22 Apr. 1968

### Summary of scientific research

My research themes in Chemical Physics have explored novel effects in relation to the Bond Structure. These novel themes fall into Groups, conveniently referred to by the years of publication, generally in Proceedings of the Royal Society, sometimes other journals of Chemical Physics.

Group: Slow oxidation and detonation of gases (1935; 1962; 1966; 1968; 1970).

Group: Isotope Effects in Hydrogen Bonds in Crystals (1937; 1938; 1939; 1942; 1945; 1946; 1949; 1950; 1953; 1955; 1956).

Group: Phase Transitions and Hysteresis observed in single crystals (1952; 1953; 1955; 1959; 1961; 1963).

Group: Mechanisms of Melting, Pre-melting and Pre-freezing in relation to different bond types (1938; 1953; 1956; 1958; 1959; 1960; 1961; 1963; 1966).

Cf. also: Liversidge Lecture, Chemical Society 1960; Charles Tennant Lecture, Soc. Chem. Ind. 1961; Solvay Conference Lecture, Brussels, 1969.

Group: Molten salts with organic anions (1966; 1969; 1971; 1976).

Group: Chemical Physics of Well Ordered Graphites (1933; Nature: 1957; 1959; 1960; 1961; 1962; 1964; 1965; 1969).

Group: Synthetic Metals based on Graphite (1951; J. Chem. Soc 1959; 1960; 1962; 1963; 1964; 1970; 1971; 1972).

Also: Times Science Review (1959) 3; Umschau (1971); Messel Lecture, Society Chem. Industry (1972).