

GENEALOGY DATABASE ENTRY

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Hinshelwood, Cyril Norman

1897 - 1967

DEGREE: BA

DATE: 1920

PLACE: Oxford

TEACHER/RESEARCH ADVISOR: Hartley

Nobel Prize 1956 for research on the mechanisms of chain reactions, particularly for the elucidation of the complex system of reactions constituting the hydrogen-oxygen explosion; studied homogenous and heterogeneous catalytic reactions and the systematic kinetic studies of substituted aromatic molecules in nonaqueous solvents; interpreted some first order decompositions of organic molecules as quasi-unimolecular processes involving activation by collisional mechanisms; established the main characteristics of thermal chain reactions, including critical explosion limits (independently discovered by Semenov); investigated the physico-chemical aspects of bacterial growth, in particular the manner of growth when the bacteria are placed in a medium containing new nutrients, to which they must adapt, and the mode of inhibition of growth in the presence of antibacterial agents.

1. *Dictionary of Scientific Biography*; Charles Scribner's Sons: 1970-1990; vol. 6, p404-405.
2. *Dictionary of National Biography*; Smith, Elder & Co.: 1908-1986; (1961-1970), p516-519.
3. *Prix Nobel*; P. A. Norstedt & Soener: 1957; p64-147.
4. *Biog. Mem. Fell. Roy. Soc.* **1973**, 19, 374-431.
5. *Chem. Ind.* **1967**, 1993-1994.
6. Farber, E. *Nobel Prize Winners in Chemistry 1901-1961*; Abelard-Schuman: 1964; p263-268.
7. *Chem. Brit.* **1967**, 3, 534-536.
8. *Nature* **1967**, 216, 832-833.