

GENEALOGY DATABASE ENTRY

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Waters, William Alexander

1903 - 1985

DEGREE: PhD

DATE: 1927

PLACE: Cambridge

TEACHER/RESEARCH ADVISOR: McCombie/Scarborough

first to hypothesize (in 1932) that certain organic reactions took place by way of free radical intermediates; published (with Hey, in 1937) the seminal article that illustrated the considerable scope of the free radical mechanism; investigated generation of free radicals from azo and diazonium compounds, aryl organometallic compounds, diacyl peroxides, and photochemical processes; studied the mechanism of autoxidation reactions and the chemistry of Fenton's reagent; showed that free hydroxyl radicals are formed from hydroperoxides in the presence of metals; studied radical initiators including di-*tert*-butyl peroxide; investigated mechanisms of oxidation reactions catalyzed by CrO₃ and KMnO₄.

1. *Biog. Mem. Fell. Roy. Soc.* **1986**, 32, 599-627.
2. *Dictionary of National Biography*; Smith, Elder & Co.: 1908-1986; (1981-1985), p414-415.
3. Norman, R. O. C. *Essays on Free-Radical Chemistry, Chemical Society Special Publication 24*; Chemical Society: 1970.
4. *Notes Rec. R. Soc. Lond.* **1984**, 39, 105-124.