

# GENEALOGY DATABASE ENTRY

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Richardson, Owen Willans

1879 - 1959

DEGREE: DSc

DATE: 1904

PLACE: Univ. London

TEACHER/RESEARCH ADVISOR: Thomson

Nobel Prize in Physics 1928 for his work on the thermionic phenomenon and for the discovery of Richardson's Law or Richardson's Effect (thermionic effect), which quantified the theory of electron emission from hot bodies such as filaments and enabled the development of devices like radio and television tubes; coined the term thermion; analyzed the spectrum of molecular hydrogen; developed a theory for the conduction of electricity in metals; predicted the gyromagnetic effect which led to the discovery that the electron has a spin of  $\frac{1}{2}$ ; studied the photoelectric effect and the chemically-induced emission of electrons.

1. *Dictionary of Scientific Biography*; Charles Scribner's Sons: 1970-1990; vol. 11, p419-423.
2. *Biog. Mem. Fell. Roy. Soc.* **1959**, 5, 207-215.
3. *Dictionary of National Biography*; Smith, Elder & Co.: 1908-1986; 1951-1960, p839-841.
4. *Chem. Ind.* **1959**, 265.
5. *Jahrb. Deut. Akad. Wiss. Berlin* 1962 **1963**, 139-140.