

GENEALOGY DATABASE ENTRY

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Thomson, Joseph John

1856 - 1940

DEGREE: BA (mathematics) DATE: 1880 PLACE: Cambridge
TEACHER/RESEARCH ADVISOR: Routh

Nobel Prize 1906; discovered the electron, the first sub-atomic particle, and determined its charge-to-mass ratio; discovered that charged objects have extra inertia - the so-called electromagnetic mass; pioneer in the conduction of electricity through gases; proposed "plum pudding" model of the atom; pioneer in scattering experiments for the elucidation of atomic structure; invented first practical mass spectrometer and was first to separate isotopes of stable elements; seven of his assistants also won Nobel Prizes.

FOOTNOTE: After obtaining his degree at Cambridge, Thomson worked for four years in the Cavendish Laboratory under Strutt (Lord Rayleigh).

1. *Obit. Not. Fell. Roy. Soc.* **1939-41**, 3, 587-609.
2. *Dictionary of National Biography*; Smith, Elder & Co.: 1908-1986; (1931-40), p857-863.
3. *Dictionary of Scientific Biography*; Charles Scribner's Sons: 1970-1990; vol. 13, p362-372.
4. Asimov, I. *Asimov's Biographical Encyclopedia of Science and Technology (2nd Ed.)*; Doubleday: 1982; p561-563.
5. *A Biographical Dictionary of Scientists*; Williams, T. I., Ed.; Wiley: 1969; p510-511.
6. *Nature* **1926**, 118(supplement), 41-60.
7. *Nature* **1940**, 146, 351-357.
8. Jaffe, B. *Crucibles*; Tudor Publ. Co.: 1930; p265-288.
9. Partington, J. R. *A History of Chemistry*; Macmillan: 1964; vol. 4, p929-932.
10. Thomson, J. J. *Recollections and Reflections*; G. Bell & Sons: 1936.
11. Rayleigh, R. J. S. *Life of J. J. Thomson*; Cambridge University Press: 1943.
12. Thomson, G. P. *J. J. Thomson and the Cavendish Laboratory in his Day*; Doubleday: 1965.