GENEALOGY DATABASE ENTRY

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Ramsay, William 1852 - 1916

DEGREE: PhD DATE: 1872 PLACE: Tübingen

TEACHER/RESEARCH ADVISOR: Fittig

Nobel Prize in 1904 for the discovery and isolation of the family of inert gases of the atmosphere, and for the theoretical work that situated these elements in the periodic table; investigated pyridine bases and pyridine acids, and synthesized pyridine; studied the relationship between the acids formed from the oxidation of the alkaloids of both quinine and cinchonine and the pyridine acids formed from pyridine bases, showing the connection between pyridine and its derivative alkaloids; one of the first to offer a plausible explanation for Brownian movement; investigated critical states with Sydney Young, publishing more than 30 papers on vapor pressure and critical states of liquids; determined the molecular weights of associated (or aggregated) liquids and verified Eötvös's determination in 1886 of a linear relationship between surface tension and temperature; with Shields, developed an experimental method for determining the molecular weight of a substance in the liquid state; first to propose use of helium in balloons; discovered that helium is present in minerals of Th and U and thereby obtained the first evidence that radioactive decay involves the transmutation of elements.

- 1. Dictionary of Scientific Biography; Charles Scribner's Sons: 1970-1990; vol. 11, p277-284.
- 2. A Biographical Dictionary of Scientists; Williams, T. I., Ed.; Wiley: 1969; p432-433.
- 3. Asimov, I. *Asimov's Biographical Encyclopedia of Science and Technology (2nd Ed.)*; Doubleday: 1982; p537-538.
- 4. Great Chemists; Farber, E., Ed.; Interscience: 1961; p997-1012.
- 5. Partington, J. R. A History of Chemistry; Macmillan: 1964; vol. 4, p915-918.
- 6. J. Chem. Soc. Trans. 1917, 111, 369-376.
- 7. Proc. Roy. Soc. A 1917, 93, xlii-liv.
- 8. J. Franklin Inst. 1918, 186, 29-55.
- 9. Bull. Soc. Chim. France 1919, 25, 401-426.
- 10. Tilden, W. A. Famous Chemists; Routledge & Sons: 1921; p273-287.
- 11. Proc. Am. Acad. Arts Sci. 1952, 81, 84-88.
- 12. Ann. Rept. Smithsonian Inst. 1919, 74, 531-546.
- 13. Sci. Monthly 1919, 9, 167-178.
- 14. Nature 1952, 170, 554-555.
- 15. Proc. Am. Phil. Soc. 1917, 56, iii-viii.
- 16. Tilden, W. A. Sir William Ramsay; Macmillan & Co.: 1918.
- 17. Travers, M. W. A Life of Sir William Ramsay; E. Arnold: 1956.
- 18. Das Buch der Grossen Chemiker; Bugge, G., Ed.; Verlag Chemie: 1930; vol. 2, p229-287.
- 19. Farber, E. *Nobel Prize Winners in Chemistry 1901-1961*; rev. ed.; Abelard-Schuman: 1963; p15-18.
- 20. British Chemists; Findlay, A., and Mills, W. H., Eds.; The Chemical Society: 1947; p146-175.