

# GENEALOGY DATABASE ENTRY

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Berzelius, Jons Jacob

1779 - 1848

DEGREE: MD

DATE: 1802

PLACE: Uppsala

TEACHER/RESEARCH ADVISOR: Afzelius

discovered Ce, Se, Si, and Th; first used the term "organic chemistry" and published first independent treatment of organic chemistry in 1827; first to electrolyze salts; invented series of electronegativities; suggested modern symbols for elements and invented modern chemical formulas; proposed words: isomerism, allotropy, catalysis, protein, polymer, halogen, and electronegative; proved law of definite proportions; generated first accurate list of atomic weights; invented the mercury cathode; discovered ammonium amalgam and pyruvic acid; studied chemistry of silicic acid; extensively investigated fluorides of many elements; analyzed meteorites and concluded they were of extraterrestrial origin.

1. *Dictionary of Scientific Biography*; Charles Scribner's Sons: 1970-1990; vol. 2, p90-97.
2. *Great Chemists*; Farber, E., Ed.; Interscience: 1961; p385-402.
3. Asimov, I. *Asimov's Biographical Encyclopedia of Science and Technology (2nd Ed.)*; Doubleday: 1982; p288-289.
4. Partington, J. R. *A History of Chemistry*; Macmillan: 1964; vol. 4, p142-177.
5. Jaffe, B. *Crucibles*; Tudor Publ. Co.: 1930; p136-156.
6. Weeks, M. E. *Discovery of the Elements (7th Ed.)*; Leicester, H. M., Ed.; J. Chem. Ed.: 1968; p305-317.
7. *Swedish Men of Science 1650-1950*; Lindroth, E., Ed.; Almqvist & Wiksell: 1952; p160-171.
8. Tilden, W. A. *Famous Chemists*; Routledge & Sons: 1921; p131-151.
9. *A Biographical Dictionary of Scientists*; Williams, T. I., Ed.; Wiley: 1969; p55-56.
10. *Chem. Ind. (London)* **1948**, 474-476.
11. *Am. J. Sci.* **1853**, 16, 1-15, 173-186, 309-313, and **1854**, 17, 103-113.
12. *Am. J. Sci.* **1848**, 6, 448-451.
13. *Acta Chem. Scand.* **1948**, 2, 539.
14. *Z. Angew. Chem.* **1930**, 43, 325-329, 351-354, and 366-370.
15. *J. Chem. Ed.* **1948**, 25, 500-505.
16. *Das Buch der Grossen Chemiker*; Bugge, G., Ed.; Verlag Chemie: 1929; vol. 1, p428-449.
17. Berzelius, J. J. *J. J. Berzelius Selbstbiographische Aufzeichnungen*; Soderbaum, H. G., Ed.; H. G. Soderbaum: 1903.
18. Soderbaum, H. G. *Jac. Berzelius, Levnadsteckning*; Almqvist & Wiksells: 1929-31.
19. Jorpes, J. E. *Jac. Berzelius. His Life and Work*; University of California Press: 1970.