Holmium Encyclopedia Article

Holmium

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Holmium's atomic number is 67, its atomic weight, 164.9303, and its chemical symbol, Ho. It is a relatively soft metal with a melting point of 1,461° C (2,661.8° F) and a boiling point of 2695° C (4,883° F).

Credit for the discovery of holmium is usually assigned to Per Teodor Cleve (1840-1905), a Swedish chemist who was a professor at the University of Uppsala. In 1879, Cleve discovered that the rare earth mineral *erbia* was not a pure substance, but a mixture of three oxides. In addition to the oxide called erbia itself, the mineral also contained the oxides of two other elements, holmia and thulia. Cleve selected the name *holmium* for one of the new elements in honor of his city of birth, Stockholm.

Holmium had actually been identified the previous year by two Swiss chemists, Marc Delafontaine (1837-1911) and Jacque-Louis Soret. Delafontaine and Soret observed a previously unreported set of spectral absorption bands that they attributed to a new "element X." They later accepted the name *holmium for their "element X."*

Although holmium has some rather unusual magnetic and electrical properties, few important uses have been found for it.