*** Name Origin:**

After Alfred Nobel, who invented dynamite and founded Nobel Prize.

*** Sources:**

Made by bombarding curium with carbon 13

*** Uses:**

None

*** Additional Notes:**

Nobelium was unambiguously discovered and identified in April 1958 at Berkeley by A. Ghiorso, T. Sikkeland, J. R. Walton, and G. T. Seaborg, who used a new double-recoil technique. A heavy-ion linear accelerator (HILAC) was used to bombard a thin target of curium (95% 244Cm and 4.5% 246Cm) with ^{12}C ions to produce ^{254}No according to the ^{246}Cm (^{12}C, 4n) reaction. Earlier in 1957 workers of the U.S., Britain, and Sweden announced the discovery of an isotope of Element 102 with a 10-min half-life at 8.5 MeV, as a result of bombarding ^{244}Cm with ^{13}C nuclei. On the basis of this experiment the name nobelium was assigned and accepted by the Commission on Atomic Weights of the International Union of Pure and Applied Chemistry. The acceptance of the name was premature, for both Russian and American efforts now completely rule out the possibility of any isotope of Element 102 having a half-life of 10 min in the vicinity of 8.5 MeV. Early work in 1957 on the search for this element, in Russia at the Kurchatov Institute, was marred by the assignment of 8.9 ± 0.4 MeV alpha radiation with a half-life of 2 to 40 sec, which was too indefinite to support claim to discovery. Confirmatory experiments at Berkeley in 1966 have shown the existence of ^{254}No with a 55-s half-life, ^{252}No with a 2.3-s half-life, and ^{257}No with a 25-s half-life. Twelve isotopes are now recognized, one of which — ^{255}No has a half-life of 3.1 min. In view of the discover's traditional right to name an element, the Berkeley group, in 1967, suggested that the hastily given name nobelium, along with the symbol No, be retained.