*** Name Origin:**

The element with atomic number 115 is historically known as Moscovium.

*** Sources:**

It is placed as the heaviest member of the group 13 (IIIA) elements although a sufficiently stable isotope is not known at this time that would allow chemical experiments to confirm its position. It was first detected in 2003 in the decay of ununpentium and was synthesized directly in 2004. Only fourteen atoms of ununtrium have been observed to date. The longest-lived isotope known is 286Mc with a half-life of ~20 s, allowing first chemical experiments to study its chemistry.

*** Uses:**

None

*** Additional Notes:**

The first report of Moscovium was in August 2003 when it was identified as a decay product of ununpentium. These results were published on February 1, 2004, by a team composed of Russian scientists at Dubna (Joint Institute for Nuclear Research), and American scientists at the Lawrence Livermore National Laboratory.[2][3]

On July 23, 2004, a team of Japanese scientists at RIKEN detected a single atom of 278MC using the cold fusion reaction between bismuth-209 and zinc-70. They published their results on September 28, 2004.[4]

Support for their claim appeared in 2004 when scientists at the Institute of Modern Physics (IMP) identified 266Bh as decaying with identical properties to their single event (see bohrium).

The RIKEN team produced a further atom on April 2, 2005, although the decay data were different from the first chain, and may be due to the formation of a meta-stable isomer.

The Dubna-Livermore collaboration has strengthened their claim for the discovery of Moscovium by conducting chemical experiments on the decay daughter 268Db. In experiments in June 2004 and December 2005, the dubnium isotope was successfully identified by milking the Db fraction and measuring any SF activities. Both the half-life and decay mode were confirmed for the proposed 268Db which lends support to the assignment of Z=115 and Z=113 to the parent and daughter nuclei.[5][6]

Theoretical estimates of alpha-decay half-lives of alpha-decay chains from element 113 are in good agreement with the experimental data.[7]