

*** Name Origin:**

Reontgen also spelled ROENTGEN (b. March 27, 1845, Lennep, Prussia [now Remscheid, Ger.]--d. Feb. 10, 1923, Munich, Ger.), German physicist who was a recipient of the first Nobel Prize for Physics, in 1901, for his discovery of X rays, which heralded the age of modern physics and revolutionized diagnostic medicine.

*** Sources:**

In bombardments of ^{209}Bi targets with ^{64}Ni using the velocity selector SHIP facility to discriminate in favor of the fused product, ^{273}Rg , three sets of localized alpha-decay chains were observed with position sensitive detectors. The origin was assigned to the isotope ^{272}Rg , one neutron removed from the compound nucleus. Applying the evaluation criteria to the case of Roentgenium, the data are of the highest quality. However, there is internal redundancy with just two pairs of data. Chains 2 and 3 have mutually concordant alpha energies, but ones ascribed to the previously unknown ^{264}Bh . Chains 1 and 3 also have mutually concordant alpha energies, but these are ascribed to the previously unknown ^{268}Mt . There is no redundancy involving properties of known daughters for verification purposes. Chain 2 is most compelling, matching the known ^{260}Db energy and lifetime. Unambiguous observation of its daughter ^{256}Lr in this sequence would have been sufficient to secure the discovery

*** Uses:**

None

*** Additional Notes:**

On December 20, 1994, scientists at GSI Darmstadt, Germany announced they had detected three atoms of a new element with 111 protons and 161 neutrons. This element was made by bombarding ^{83}Bi with ^{28}Ni . Signals of Element 111 appeared for less than 0.002 sec, then decayed into lighter elements including Element ^{268}Rg and Element ^{264}Rg . These isotopes had not previously been observed. A name for Element 111 has not been suggested although IUPAC has suggested a temporary name of Unununium. Following the 80th Meeting of the Bureau in Bled, Slovenia, the name roentgenium for the element of atomic number 111, with symbol Rg was officially approved as of 1 November 2004. The IUPAC Council, at its meeting at Ottawa, Canada in 2003, delegated the authority to approve a name for the element of atomic number 111 to the Bureau.