

*** Name Origin:**

The IUPAC/IUPAP Joint Working Party (JWP) assessed the claim of copernicium's discovery by the GSI team in 2001 and 2003. In both cases, they found that there was insufficient evidence to support their claim. This was primarily related to the contradicting decay data for the known nuclide rutherfordium-261. However, between 2001 and 2005, the GSI team studied the reaction $^{248}\text{Cm}(^{26}\text{Mg},5n)^{269}\text{Hs}$, and were able to confirm the decay data for hassium-269 and rutherfordium-261. It was found that the existing data on rutherfordium-261 was for an isomer, now designated rutherfordium-261m.

*** Sources:**

Copernicium was first created on February 9, 1996, at the Gesellschaft für Schwerionenforschung (GSI) in Darmstadt, Germany by Sigurd Hofmann, Victor Ninov et al. This element was created by firing accelerated zinc-70 nuclei at a target made of lead-208 nuclei in a heavy ion accelerator. A single atom (the second has subsequently been dismissed) of copernicium was produced with a mass number of 277.

In May 2000, the GSI successfully repeated the experiment to synthesize a further atom of Cn-277. This reaction was repeated at RIKEN using the GARIS set-up in 2004 to synthesize two further atoms and confirm the decay data reported by the GSI team.

The IUPAC/IUPAP Joint Working Party (JWP) assessed the claim of discovery by the GSI team in 2001 and 2003. In both cases, they found that there was insufficient evidence to support their claim. This was primarily related to the contradicting decay data for the known isotope ^{261}Rf . However, between 2001 and 2005, the GSI team studied the reaction $^{248}\text{Cm}(^{26}\text{Mg},5n)^{269}\text{Hs}$, and were able to confirm the decay data for ^{269}Hs and ^{261}Rf . It was found that the existing data on ^{261}Rf was for an isomer, now designated ^{261a}Rf . In May 2009, the JWP reported on the claims of discovery of element 112 again and officially recognized the GSI team as the discoverers of element 112. This decision was based on recent confirmation of the decay properties of daughter nuclei as well as the confirmatory experiments at RIKEN.

*** Uses:**

None

*** Additional Notes:**

It was first created in 1996 by the Gesellschaft für Schwerionenforschung (GSI)