



Einsteinium

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Scientists at the California-based Berkeley Laboratory studied the properties of element having atomic number of 99 in the periodic table which is called 'Einsteinium' after Albert Einstein. After this study, for the first time researchers have been able to characterize the 'properties of the elements'.

This team of scientists studied 'Einsteinium-254', one of the more stable isotopes of the element, which has a half-life of 276 days. 'Einsteinium 253', the most common isotope of Einsteinium, has a half-life of 20 days.

This element has eroded due to high radioactivity and short lifetime of all isotopes and is no longer found naturally, but can be produced by intensive and precise chemical processes.

This element was discovered in the year 1952 from the debris obtained after the explosion of first hydrogen bomb. The explosion occurred in a thermonuclear device called 'Ivy Mike' during a test on an island called Elugelab, located on 'Anivetok Atoll' in the South Pacific Ocean, which was 500 times more devastating than the explosion in Nagasaki.

Currently this element is available in limited quantities, which can be used only for scientific research. It cannot be seen with the naked eye. After this research, scientists have been able to understand the complexity of bonds with other atoms of this element using an exact X-ray produced by the Particle Accelerator.

By studying this atomic system, scientists can find out the important chemical properties of other elements and its isotopes, which can be useful for nuclear power generation and radiopharmaceutical.