

Ernest rutherford

[Science](#), [Physics](#)



Ernest Rutherford Born on August 30, 1871, Earnest Rutherford made significant contributions in the field of science, especially physics by carrying out experiments to illustrate the concept of radioactivity (BBC 1). He is famous for coining the names alpha, beta, and gamma rays in a bid to classify the various forms of rays since the concept was barely understandable in those days (Nobel Media 1). In this case, the scientist made a significant contribution in electromagnetic radiation. Furthermore, Ernest observed that radioactivity of objects reduced with time (Rutherford 17). Eventually, he came up with the term half-life as the time it takes for the radioactive materials to disintegrate.

Earnest' s contribution in nuclear physics has contributed to a great deal in the area of modern physics and chemistry (Weisstein 1). The concept of radioactivity, especially the alpha, beta, and gamma rays is the basis of understanding how solar radiation reaches the earth and the overall effect on atmospheric temperature. Earnest found that gamma rays were of high frequencies and if they reached the earths surface, the temperatures could be high and unbearable for the inhabitants. On the other hand, the discovery of the nucleus of individual elements is the basis for the modern nuclear energy (Mahanti 1). The concept is useful in providing alternatively cleaner sources of energy.

According to CENTER FOR HISTORY OF PHYSICS AT AIP, Ernests experiments have a significant effect on my understanding of how X-rays work. X-rays, as one of the elements of the electromagnetic spectrum, is useful for me to an individual for diagnosis of bone fractures and checking on my internal organs. On the other hand, sun's irradiation on the earth is an issue affecting

every person. The intensity of global warming and climate change requires good knowledge of how the sun irradiates the earth's surface. Discovery of nuclear physics is also the basis of modern energy thus useful in my understanding of providing alternatives to non-renewable sources of energy (Henley, Ernest, and Stephen 23).

Works Cited

- BBC. Ernest Rutherford (1871 - 1937). Web. 2014. Accessed from http://www.bbc.co.uk/history/historic_figures/rutherford_ernest.shtml
- CENTER FOR HISTORY OF PHYSICS AT AIP. Alpha Particles and the Atom Rutherford at Manchester, 1907-1919. 2015. Web. Accessed from <http://www.aip.org/history/exhibits/rutherford/sections/alpha-particles-atom.html>
- Henley, Ernest M., and Stephen D. Ellis, eds. 100 years of subatomic physics. World Scientific, 2013.
- Mahanti, Subodh. Ernest Rutherford "The Newton of Atomic Physics". Vigyan Prasar Science Portal. Web. 2015. Accessed from <http://www.vigyanprasar.gov.in/scientists/ERutherford.htm>
- Nobel Media. Ernest Rutherford-Biographical. Nobelprize.org. Web. 2015. Accessed from http://www.nobelprize.org/nobel_prizes/chemistry/laureates/1908/rutherford-bio.html
- Rutherford, Ernest. The Collected Papers of Lord Rutherford of Nelson Volume 1. Vol. 2. Routledge, 2014.
- Weisstein, Eric, E. Rutherford, Ernest (1871-1937). ScienceWorldfram.com. Web. 2015. Accessed from <http://scienceworld.wolfram.com/biography/Rutherford.html>
- <https://assignbuster.com/ernest-rutherford/>