

Student Essay on James Chadwick

James Chadwick

(c)2015 BookRags, Inc. All rights reserved.

Contents

Student Essay on James Chadwick.....	1
Contents.....	2
Essay.....	3

Essay

My report is on James Chadwick, he officially discovered the neutron as we know it. He was born October 20th 1891 in Manchester, England. He attended Manchester high school and moved on to Manchester and Cambridge University. During WW1 Chadwick was interned in Germany as an enemy alien. After the war was over he returned to Cambridge where he worked with Rutherford in investigating the emission of gamma rays from radioactive materials. In 1921 he became assistant director of the lab. In 1919 Rutherford discovered the proton but saw that it didn't equal the atomic number. Their first hypothesis was that there were extra protons in the nucleus that were cancelled out by the electrons.

Chadwick's own research mostly about focused about radioactivity. The first person to make up the electron was Rutherford but he no evidence. Chadwick thought about this sometimes while he worked on his other things. In Europe the experiments from Frederic and Irene Joliot-Curie caught his attention. They did other experiments to track particle radiation. He tried their experiments but looking for the neutral particle. In this he succeeded and in 1935 he received the Nobel Prize for his discovery.

After this he moved to the United States and became a physics professor at Liverpool University. In 1935 he joined the Manhattan Project in the US. Here he worked with a bunch of scientist in developing the atom bombs dropped in Japan. After the war he went back to Liverpool University until he left to Cambridge. He died July 24th 1974 in Cambridge.