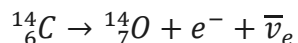


Question #80915

if carbon-14 releases a beta radiation, what will happen to the nucleus of the C-14? what is the the symbol of the newly formed isotope?

Answer:

According to the beta decay scheme [1], in the following reaction produces an oxygen-14:



A certain amount of energy is produced and the charge of the element increases during the decay. It happens because of that one of the neutrons in the nucleus is converting into a proton, electron, and an antineutrino. The symbol of the newly formed isotope is ${}^{14}_7\text{O}$.

Reference:

[1] https://en.wikipedia.org/wiki/Beta_particle

Answer provided by www.AssignmentExpert.com