Answer on Question #53096 – Chemistry – Physical Chemistry

Retaliative Abundance a sample contains -32 sulfur and sulfur -36 if the average mass is 33 amu what is the abundance of sulfur 32

Solution:

Let suppose abundance of ^{32}S is *x*, so abundance of ^{36}S is *1-x*. Average mass of sample is :

$$32x + 36(1 - x) = 33$$

$$32x + 36 - 36x = 33$$

$$4x = 3$$

$$x = \frac{3}{4}$$

$$x = 0.75$$

Or 75 %

Answer: The abundance of ^{32}S is 75 %.