

Marks
2

- ^{11}C is used in positron emission tomography – PET. It is synthesised by bombarding a ^{14}N target with protons. Write a nuclear equation for the formation of ^{11}C and thus identify the by-product of this synthesis.

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^{11}C undergoes positron decay with a half life of 20.3 minutes. Write a nuclear equation to identify the product of this decay reaction.

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