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Problem 55.33 (RHK)

Some uranium samples from the natural reactor site were found to be slightly enriched in ^{235}U , rather than depleted. We have to account for this in terms of neutron absorption by the abundant isotope ^{238}U and the subsequent beta and alpha decay of its products.

Solution:

A possible chain of nuclear processes that can result in conversion of ^{238}U into ^{235}U by neutron absorption and subsequent beta and alpha decay is

