Study of fission fragments produced by $^{14}N + ^{235}U$ reaction

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This work was performed to understand the structure of neutron rich fission fragments around $\approx$ 130 region. A thin metallic ^{235}U target was bombarded by ^{14}N beam with 10 MeV/A from the Separated Sector Cyclotron at the National Accelerator Centre, Cape Town, South Africa. The main goal to detect and identify fission fragments and to obtain their mass distribution was achieved by using Solar Cell detectors in the AFRODITE (**A**frican **O**mnipurpose **D**etector for **I**nnovative **T**echniques and **E**xperiments) spectrometer. The X-rays emitted from fission fragments were detected by LEP detectors and γ rays emitted from excited states of the fission fragments were detected by CLOVER detectors in the spectrometer.