

Nuclear Chemistry

Question1

The synthetically produced radioactive noble gas by the collision of ${}_{98}^{249}\text{Cf}$ with ${}_{20}^{48}\text{Ca}$ is

KCET 2024

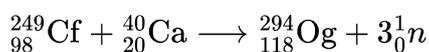
Options:

- A. radon
- B. radium
- C. oganesson
- D. xenon

Answer: C

Solution:

The reaction of ${}_{98}^{249}\text{Cf}$ and ${}_{20}^{40}\text{Ca}$ takes place as follows



Thus, the radioactive noble gas formed is Oganesson ($Z = 118$)

