Radiation History of Fission Gamma-Ray Spectra

Research Overview

We measure prompt and delayed γ -rays in response to neutron-induced fission to identify fissionable materials.

The isotopic compositions of fallout can provide important forensic information.



Potential Collaborations

Research Areas:

- Production of actinide targets on thin Ti
- Characterize dual-fission ionization chamber using ²⁵²Cf or neutron beams
- Measure fission product yield (FPY) vs.
 incident neutron energy
- Post irradiation, γ-assay activation foil to determine fission yield of key nuclear forensics products
- Investigate signatures for nuclear forensics
- Compare the fission product-yield data with the ENDF libraries and FIER code