

# Fission Product Yield Measurements from Neutron Induced Fission of $^{235,238}\text{U}$ and $^{239}\text{Pu}$

M. A. Stoyer,<sup>1</sup> A. P. Tonchev,<sup>1</sup> J. A. Silano,<sup>1</sup> M. E. Gooden,<sup>2</sup> J. B. Wilhelmy,<sup>2</sup> W. Tornow,<sup>3</sup> C. R. Howell,<sup>3</sup> F. Krishichayan,<sup>3</sup> and S. Finch<sup>3</sup>

<sup>1</sup>Lawrence Livermore National Laboratory, Livermore, CA 94550 USA

<sup>2</sup>Los Alamos National Laboratory, Los Alamos, NM 87545 USA

<sup>3</sup>Triangle Universities Nuclear Laboratory, Durham, NC 27708 USA

Fission product yields (FPY) are one of the most fundamental quantities that can be measured for a fissioning nucleus and are important for basic and applied nuclear physics. Recent measurements [1–3] using mono-energetic and pulsed neutron beams generated using Triangle Universities Nuclear Laboratory's tandem accelerator and employing a dual fission chamber setup [4] have produced self-consistent, high-precision data critical for testing fission models for the neutron-induced fission of  $^{235,238}\text{U}$  and  $^{239}\text{Pu}$  between neutron energies of 0.5 to 15.0 MeV. These data have elucidated a low-energy dependence of FPY for several fission products using irradiations of varying lengths and neutron energies. This talk will present these measurements and discuss new measurements just beginning utilizing a RAPid Belt-driven Irradiated Target Transfer System (RABITTS) to measure shorter-lived fission products and the time dependence of fission yields, expanding the measurements from cumulative towards independent fission yields. The uniqueness of these FPY data and the impact on the development of fission theory will be discussed.

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