

Abstract Submitted  
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**Neutron-Induced Partial Gamma-Ray Cross-Section Measurements on Uranium at TUNL**<sup>1</sup> A. HUTCHESON, A.S. CROWELL, J.H. ESTERLINE, B. FALLIN, C.R. HOWELL, M. KISER, A.P. TONCHEV, W. TORNOW, Duke University/TUNL, J.H. KELLEY, North Carolina State University/TUNL, C.T. ANGELL, M. BOSWELL, H.J. KARWOWSKI, University of North Carolina/TUNL, R.S. PEDRONI, North Carolina A&T/TUNL, G.J. WEISEL, Penn State Altoona, J.A. BECKER, D. DASHDORJ, R.A. MACRI, Lawrence Livermore National Laboratory, R.O. NELSON, Los Alamos National Laboratory — Precision measurements have been performed on <sup>235,238</sup>U targets at Triangle Universities Nuclear Laboratory using a and monoenergetic neutron beam. The excitation function of (n,2n) reaction has been studied with incident energies between 5 and 15 MeV and beam flux of  $104 \text{ n s}^{-1} \text{ cm}^{-2}$  at target position. Multiple (n,n') and (n,2n) partial cross sections have been measured using clover and planar HPGE detectors in this energy range, and results will be compared with the Hauser-Feshbach model. A more in-depth explanation of the techniques and analysis will be presented.

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