

Abstract Submitted  
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**Commissioning of the VANDLE neutron array with beta-delayed neutron spectroscopy**<sup>1</sup> WILLIAM PETERS, Oak Ridge Associated Universities, R. GRZYWACZ, M. MADURGA, S. PAULAUSKAS, D.T. MILLER, M. ALSHUDIFAT, L. CARTEGNI, U. Tenn., C.J. GROSS, D.W. BARDAYAN, A.J. MENDEZ, K. MIERNIK, K. RYKACZEWSKI, K.T. SCHMITT, ORNL, J.C. BATCHELDER, C. MATEI, M. WOLINSKA-CICHOCKA, Oak Ridge Associated Universities, J. BLACKMON, M. MATOS, C. RASCO, Louisiana State U., J.A. CIZEWSKI, M.E. HOWARD, B. MANNING, A. RATKIEWICZ, Rutgers, S. ILYUSHKIN, F. SARAZIN, Colorado Sch. Mines — The Versatile Array of Neutron Detectors at Low Energy (VANDLE) was commissioned to study the beta-delayed neutron emission spectra of over 30 fission-fragment nuclei for the first time. The nuclei were produced at the Holifield Radioactive Ion Beam Facility at Oak Ridge National Lab and included many within possible  $r$ -process paths. A complete set of 48 detector modules, that are sensitive to 100 keV neutrons, were adjacent to 2 Ge clover gamma-ray detectors for coincidence measurements. Time of flight from a thin scintillator surrounding the implantation point to VANDLE determined the neutron energy. Details of the experiment and an assessment of the array's performance will be presented along with preliminary data from select nuclei.

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