## Abstract Submitted for the DNP10 Meeting of The American Physical Society

Characterization and Resolution of VANDLE Modules<sup>1</sup> IRENA SPASSOVA, Rutgers University, D.W. BARDAYAN, Oak Ridge National Laboratory, J.C. BLACKMON, Louisiana State University, J.A. CIZEWSKI, Rutgers University, R.K. GRZYWACZ, M. MADURGA, University of Tennessee, B. MANNING, Rutgers University, C. MATEI, Oak Ridge Associated Universities, E. MERINO, P.D. O'MALLEY, Rutgers University, S. PAULAUSKAS, University of Tennessee, W.A. PETERS, Oak Ridge Associated Universities, F. RAIOLA, F. SARAZIN, D. WALTER, Colorado School of Mines — The Versatile Array of Neutron Detectors at Low Energies (VANDLE) is being developed to study the properties of unstable nuclei via (d,n) reactions and beta-delayed neutron emission. It is composed of scintillator bars of two sizes, 60 cm and 2 m, coupled to photomultiplier tubes. Twenty of these bars have been constructed into VANDLE modules and voltages have been gain matched for various energy ranges, and attenuation lengths measured. Measurements were recorded for position and timing resolutions of each module. The results of these characterizations with respect to different assembly parameters will be presented.

<sup>1</sup>This work was supported by U.S. DOE and NSF grants.

Irena Spassova Rutgers University

Date submitted: 02 Aug 2010 Electronic form version 1.4