Abstract Submitted
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Calibrations of MoNA-LISA VANDLE ^{56}Ni(d,n)^{57}Cu Experiment[1] R. IKEYAMA, University of Wisconsin-La Crosse, J.A. CIZEWSKI, Rutgers, The State University of New Jersey, W.A. PETERS, University of Tennessee, Joint Institute for Heavy Ion Research, Z.J. BERGSTROM, Tennessee Technological University, S.V. PAULAUSKAS, University of Tennessee at Knoxville, P.A. DEYOUNG, Hope College, J. HINNEFELD, Indiana University South Bend, W. ROGERS, Westmont College, T. BAUMANN, M. JONES, J.K. SMITH, Michigan State University, S.R. LESHER, University of Wisconsin-La Crosse, RIBENS COLLABORATION, VANDLE COLLABORATION, MONA COLLABORATION — A (d,n) proton transfer experiment, in inverse kinematics, was conducted at the National Superconducting Cyclotron Laboratory using a 35 MeV/nucleon beam of ^{56}Ni. This experiment used both the Versatile Array of Neutron Detectors at Low Energy (VANDLE) at back angles to detect neutrons with less than 20 MeV and the MoNA-LISA array at forward angles for higher energy neutrons and to cover a large angular range. The experiment attempts to measure the spectroscopic factors of the ^{57}Cu resonance important in the *rp*-process, and determination of the reaction rate. Precise calibrations of all the detector subsystems are crucial for identifying the kinematic signature of the ejected neutrons and the extracting the spectroscopic factors to the different energy levels. Calibrations of the charged particle detectors and the neutron detector arrays are ongoing. Preliminary results pertaining to detector calibrations will be presented as well as details of the experimental setup.

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