

Abstract Submitted  
for the DNP07 Meeting of  
The American Physical Society

**Observation of isomer production in abrasion fission of  $^{238}\text{U}$  on a  $^9\text{Be}$  Target** A.S. NETTLETON, A.M. AMTHOR, C.M. FOLDEN III, T.N. GINTER, M. HAUSMANN, D.J. MORRISSEY, M. PORTILLO, B.M. SHERRILL, O.B. TARASOV, NSCL, T. KUBO, T. NAKAO, H. TAKEDA, RIKEN, W.D. LOVELAND, Oregon State University, S.L. MANIKONDA, Argonne National Laboratory, G.A. SOULIOTIS, Texas A&M University — This talk will present the observation of gamma decay from isomeric states produced in abrasion fission of  $^{238}\text{U}$  on a  $^9\text{Be}$  target at 80 MeV/nucleon. This experiment was performed at the National Superconducting Cyclotron Laboratory at Michigan State University. The fission products were identified by A, Z and Q, with the gamma decay observed within a 20 microsecond window following implantation in a silicon telescope. This technique, for identification of breakup products is known as isomer tagging,. Isomer tagging has become an important tool for in-flight fragment identification of fission and fragmentation products. Unfortunately an extensive database of isomers is unavailable for much of the neutron rich region populated by fission. Because of this, one of the goals of fission studies at the NSCL has been to measure the population of isomeric states. These results along with the possible identification of previously unknown isomeric states will be presented.

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Date submitted: 13 Aug 2007

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