

Abstract Submitted  
for the DNP10 Meeting of  
The American Physical Society

**Cross Sections for Proton-Induced Reactions on  $^{103}\text{Rh}$** <sup>1</sup> J. BEN-ITEZ, E.B. NORMAN, H. SHUGART, H. YANG, UC Berkeley and LBNL, M. PEDRETTI, LLNL — Several different medically useful radioisotopes can be produced from proton induced reactions on  $^{103}\text{Rh}$ . While much data already exists, we have extended cross sections measurements up to 55-MeV proton energy. Stacks of  $^{103}\text{Rh}$  foils were bombarded with protons from Lawrence Berkeley National Lab's 88-Inch Cyclotron. By using the stacked foil activation technique, with copper foils as degraders, excitation functions from 25 MeV to 55MeV were obtained. Following the irradiations, beta-delayed gamma rays from each target were measured using high-purity planar and coaxial Ge detectors. We will present experimental details and excitation functions for the production of  $^{99}\text{Pd}$ ,  $^{100}\text{Pd}$ ,  $^{101}\text{Pd}$ ,  $^{103}\text{Pd}$ , and  $^{99}\text{Rh}$ ,  $^{100}\text{Rh}$ ,  $^{101}\text{Rh}^{g,m}$ ,  $^{102}\text{Rh}^{g,m}$ . Results from our measurements will be compared to previously published data.

<sup>1</sup>This work is supported in part by the U.S. Depts. of Homeland Security and Energy.

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Date submitted: 01 Jul 2010

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