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In-beam gamma-ray spectroscopy of 172Os[1] K. ALEKSANDROVA, University of Richmond, P. MANCHEV, M.S. FETEA, University of Richmond, A. HEINZ, WNSL, Yale University, G. GURDAL, R. CASPERSON, R.F. CASTEN, WNSL, Yale University, M. CHAMBERLAIN, University of Surrey, UK and WNSL, Yale University, E.A. MCCUTCHAN, J. QIAN, WNSL, Yale University, N.J. THOMPSON, University of Surrey, UK and WNSL, Yale University, V. WERNER, R. WINKLER, WNSL, Yale University — A 30Si beam was used for a test experiment at the WNSL facility. The production of the compound nucleus 174Os was achieved through complete fusion in a 100 ug/cm2 144Sm target at beam energy of 134MeV. Gamma-rays from residual nuclei were detected with the YRAST ball array consisting of 7 Compton-suppressed clover detectors. A number of Os isotopes, in particular 172Os were also detected. While the main goal of the experiment was the commissioning of a gas-filled detector, we present here data from in-beam gamma-ray spectroscopy.

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Kalina Aleksandrova
University of Richmond

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