

Abstract Submitted
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Proton-transfer studies of astrophysically-interesting nuclei using the JENSA gas-jet target¹ D.W. BARDAYAN, S.D. PAIN, S.T. PITTMAN, K. SCHMITT, M.S. SMITH, ORNL, K. CHIPPS, U. GREIFE, Col. School Mines, J. BROWNE, A. KONTOS, F. MONTES, H. SCHATZ, NSCL, J.C. BLACKMON, L. LINHARDT, M. MATOS, LSU, K.L. JONES, U. Tenn. — Explosive hydrogen burning occurring in novae and x-ray bursts produce and involve reactions on proton-rich radioactive nuclei that have scarcely been studied in the laboratory. Exotic beam facilities are required to study many of these nuclei but beam intensities are not typically high enough to measure the reactions of interest directly. An alternative to directly measuring proton capture is to study proton transfer reactions such as (${}^3\text{He}, d$). The JENSA gas jet target is being constructed at ORNL to produce a localized target of ${}^3\text{He}$ to facilitate such studies. The JENSA target will be described along with plans for its use at the ReA3 facility at the NSCL.

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D.W. Bardayan
ORNL

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