

Abstract Submitted  
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**Isoscaling of  $Z=1$  to 17 fragments from the reaction of  $^{86,78}\text{Kr}$  with  $^{64,58}\text{Ni}$  targets at 35MeV/nucleon** R.Q. DIENHOFFER, State University of New York, College at Oswego, S. WUENSCHERL, S.J. YENNELLO, G. SOULIOTIS, Z.W. KOHLEY, Cyclotron Institute, Texas A&M University, A.L. CARALEY, State University of New York, College at Oswego, S. GALANOPOULOS, K. HAGEL, L.W. MAY, D.V. SHETTY, S.N. SOISSON, B.C. STEIN, Cyclotron Institute, Texas A&M University — Isoscaling is the exponential relationship found when comparing the ratio of the yields between neutron-rich and neutron-poor systems produced in nuclear reactions. The reactions of  $^{86,78}\text{Kr}$  projectiles on  $^{64,58}\text{Ni}$  targets at 35MeV/nucleon were studied with the NIMROD-ISiS array. The  $4\pi$  coverage and isotopic resolution (through  $Z = 17$ ) of the NIMROD-ISiS array allows reconstruction of the quasi-projectile in both  $Z$  and  $A$ . Well-defined quasi-projectile sources were extracted from the data. Isoscaling was first attempted by comparing the yields between different systems with little success. The yields from three bins in the  $N/Z$  of the quasi-projectile (less than 1, between 1 and 1.2, and greater than 1.2) were then compared between systems with similar results. Finally, the yields from the neutron-rich and neutron-poor quasi-projectiles within each system were isoscaled successfully. The isoscaling of  $Z = 1-17$  will be presented.

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