

Abstract Submitted
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Investigating the Effects of Aluminum Additions in $Cu_{55-x}Zr_{45}Al_x$ Metallic Liquids¹ LEAH ZIMMER, SARAH BERTRAND, PEADAR MCGRATH, St. Norbert College, NICHOLAS MAURO, St. Norbert College Assistant Professor of Physics — Metallic glasses, their applications and structure are topics of interest within the condensed matter community. In this work, systematic additions of aluminum in the poor bulk glass forming alloy $Cu_{55-x}Zr_{45}Al_x$ ($x = 0-10$) provide the means to track structural evolution with compositional changes. In all compositions studied, a crossover temperature T_S is observed. This work provides insight into the viability of the metric T_S as a fundamental indicator of glass forming ability since the value of T_S may change as the glass forming ability changes.

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