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Trends in Light n-Capture Elements TRISTAN ODEKIRK, University of Central Arkansas, JACOB TEFFS, University of Central Arkansas, University of North Dakota — Elements are created in stars through a variety of processes including fusion and neutron-capture (n-capture). Some of these processes have been well studied and the source of these processes is believed to be known with some confidence. The elements strontium (Sr), yttrium (Y) and zirconium (Zr) reside in the mass range where there is uncertainty about the production mechanism early on the history of the Galaxy. Initially, the rapid n-capture process (r-process) was believed to be responsible for their production. No study as yet has been able to use the r-process abundances to match the lighter n-capture mass range. There may be secondary r-process responsible for this mass range. Seeking trends in the abundances of Light n-Capture elements is one tool for establishing the types of sites that might be the source of these elements.

Tristan Odekirk University of Central Arkansas

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