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Impurity Studies in $CeCoIn_5$ ABEBE KEBEDE, NC A&T State Unviversity, TERELL DIAL, NC A&T State University, NHMFL-LOS ALAMOS COLLABORATION — Systematic alloy studies of $CeTIIn_5$ (T = Co, Rh, Ir,) reveal the stability of superconductivity in a wide range of composition; and in some cases it coexists with a magnetically ordered phase. We extended these studies to include (R, Ce)(Co, M)In₅ are (R= Pr and M= Fe, Mn). Our preliminary measurements indicate that the samples are single phase, and they exhibiting a wide range of transport and magnetic properties. In this communication we present the results of our resistivity and magnetic susceptibility measurements.

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