

Abstract Submitted
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Terbium-Aluminum (TbAl₂) Binary Alloy as High Magnetostrictive Material¹ MARY BOGHOSIAN, CARLOS SANCHEZ, OSCAR BERNAL, ARMEN KOCHARIAN, California State University, Los Angeles, CA 90032, CAL STATE LA TEAM — Magnetic phase diagram for the cubic intermetallic terbium-aluminum (Tb-Al) binary alloy is being investigated for the purpose of developing material with high magnetostrain properties that can be used for energy harvesting. Low temperature magnetizations, specific heat, combined with structural examinations are few of the techniques that are being used for this purpose. Preliminary DC magnetization results on as-cast material show magnetic ordering of around 109 K in zero applied fields that varies in magnitude and direction with the increase of applied magnetic field. The preliminary results will be discussed.

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