

Abstract Submitted
for the 4CF14 Meeting of
The American Physical Society

Pressure Induced Superconductivity of BaLi₄¹ ANNE MARIE SCHAEFFER, University of Utah, SCOTT TEMPLE, University of Washington, ELLA OLEJNIK, SHANTI DEEMYAD, University of Utah — We studied the pressure-induced superconductivity of BaLi₄ up to 53 GPa by means of electrical resistivity in a diamond anvil cell. Superconductivity in BaLi₄ is first observed at a pressure of 5.4 GPa with a superconducting critical temperature (T_c) of 4.5 K. Below 2 GPa, superconductivity is not observed above the minimum temperature achievable in the current study, 2 K. Between 5.4 and 12 GPa, the T_c increases steeply to its maximum value of 7 K. Above 12 GPa, the pressure dependence of T_c is complex and the sign of dT_c/dP changes several times in going up to the maximum pressure studied, of 53 GPa.

¹Pressure Induced

Anne Marie Schaeffer
University of Utah

Date submitted: 12 Sep 2014

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