## Abstract Submitted for the MAR09 Meeting of The American Physical Society

Transport and Magnetic Properties of ErNi2B2C W.C. LEE, Dept. of Physics. Sookmyung Women's Univ. Seoul 140-742, Korea — We measured the magnetization M(H,T) and magnetoresistivity  $\rho(H,T)$  of ErNi2B2C single crystal for magnetic fields perpendicular and parallel to the c-axis and with the current along the c-axis at low temperature regions. From the magnetoresistivity measurements with the current along c-axis, we constructed the  $H_{c2}(T)$  curves for magnetic perpendicular and parallel to the c-axis and those were compared for curves with the current perpendicular to the c-axis. Also we constructed a magnetic phase diagram only the magnetic field perpendicular to the c-axis

W.C. Lee Dept. of Physics. Sookmyung Women's Univ. Seoul 140-742, Korea

Date submitted: 19 Nov 2008 Electronic form version 1.4