

Abstract Submitted
for the MAR15 Meeting of
The American Physical Society

Magnetic Anisotropy in DyNi₂B₂C system W.C. LEE, Dept. of Physics, Sookmyung Women's Univ. Seoul 140-742, Korea — To figure out the magnetic and transport anisotropy in DyNi₂B₂C which have superconducting critical temperature T_c lower than the antiferromagnetic Neel temperature T_N among RNi₂B₂C (R= rare earth elements) compounds, we have measured the static magnetization curves $M(H,T)$ with the applied magnetic fields parallel and perpendicular to the crystallographic c -axis at various temperatures and applied magnetic fields. We have observed several magnetic transitions only for the applied magnetic field perpendicular to the c -axis and such magnetic transitions have shift sensitively to the higher temperature regions. We compared our results with the Dy⁺³ magnetic sublattice structure previously reported from neutron scattering experiments

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

Date submitted: 31 Oct 2014

Electronic form version 1.4