

## Study of Magnetic Field Profiles in Striated YBCO Thin Film using Scanning Hall Probe Microscopy

W. S. Yoon<sup>a</sup>, H. -C. Ri<sup>a,\*</sup>, C. J. Kim<sup>b</sup>, B. G. Kim<sup>c</sup>

<sup>a</sup> *Department of Physics, Kyungpook National University, Daegu 702-701, Republic of Korea*

<sup>b</sup> *Nuclear Nanomaterials Development Laboratory, Korea Atomic Energy Research Institute(KAERI), Daejeon 305-353, Republic of Korea*

<sup>c</sup> *HANARO Utilization Technology Development Center, Korea Atomic Energy Research Institute(KAERI), Daejeon 305-353, Republic of Korea*

A scanning Hall probe microscope has been used to map the distribution of magnetic flux in YBCO strips carrying transport of magnetization currents at 77K. Both shielded and trapped field were studied as a function of applied field and transport current. The results of Hall probe magnetic measurements were used in the inverse calculation to obtain the current distribution across the filaments.

Keywords : YBCO, strips, Hall probe