Rock magnetic properties in the paleointensity experiment of the Hawaiian 1995 lava

Ayako Ito[1], Hideo Tsunakawa[2]

[1] Earth and Planetary Sci.,TITech, [2] Earth and Planet. Sci., TITECH

The 1995 Hawaiian lava samples are inferred to have magnetic carriers of SD and SP sizes by VSM measurements and reflection microscope observations. These grains usually line up like a chain, and this suggests a possibility of magnetic interaction between SD particles. We have applied the double heating technique of the Shaw method with the low temperature demagnetization (LTD) to the samples, and the characteristic behaviors of SD particles are seen in AF demagnetization. The LTD treatment reveals spherule particles of SD with magnetocrystalline anisotropy in the sample. Besides, ARM after the first heating increases in intensity up to 20after LTD. This implies the reversed component of ARM in the sample. We examine if this curious behavior is limited in the laboratory heating or not.