Archeomagnetic study of ancient kilns from Idegaura ruins, Iizuka City, Fukuoka, Japan

Masayuki Torii[1]; Tadahiro Hatakeyama[2]; Yurie Yamamoto[3]

[1] Dept. Biosphere-Geosphere, Okayama Univ. Sci.; [2] IPC, Okayama University of Science; [3] none

http://tor9.big.ous.ac.jp

Four sue-type ancient kilns were arheomagnetically studied to estimate their ages. About 12 oriented block samples were collected from every kiln and their remanent directions were measured along with the alternating field demagnetization up to 100 mT. Stable remanent directions were obtained above the demagnetization level higher than 20-30 mT for all samples. Site-mean directions of 4 kilns were tightly clustered and overlapped within their 95% confidence limits. Thus we can safely calculate between-site mean direction. The mean direction was examined with the standard paleosecular variation curve established for Kinki district by Shibuya (1980). As a result we could estimate the age of the studied kilns as AD 575+/-25. This age gives good agreement with the archeological age estimation.