

## Study on the diagenesis of bentonites at the ODP Site 808 based on the authigenic minerals

# Seiko Nakagawa[1], Harue Masuda[2]

[1] Geosciences., Osaka City Univ, [2] Dept. Geosci., Osaka City Univ.

The authigenic minerals were separated from the volcanic ash layers recovered from a 1300-meter sediment column obtained at the ODP Site 808, Nankai Trough. After chemical treatment, < 0.1-micron meter authigenic I-S mixed-layer clay mineral was obtained by centrifugation and >5-micron meter clinoptilolite and analcime by using heavy liquid made with sodiumpolytungstate. The obtained authigenic minerals were observed by XRD, SEM and AEM analysis to check the completion of mineral separation and mineral growth. The I-S mixed-layer clay was suggested to be formed by layer-by-layer transformation and the two types of zeolites by dissolution-precipitation .