

A study on submarine sediments of Southwestern sea, Korea.

LEE, You Dae, Pusan National Univ., Korea

Abstract

Surface sediments and core samples collected from the Southwestern Sea in the Korea Peninsula were investigated for clay mineral analysis.

In surface sediments, mean contents of smectite, illite, kaolinite and chlorite is 5-16 (12)%, 51-72 (62)%, 8-15 (11)%, 10-23 (15)%. Respectively, Core samples have the mean contents of smectite 12%, illite 64%, kaolinite 10% and chlorite 14%. Illite is the most dominant clay mineral species and smectite is relatively high concentrated in adjacent Korea Sea.

The clay mineral composition and particle distribution have almost same characteristics with the Yellow river sediments. Also, mud lense in Yellow sea have an effect on this area.

Consequently, the fine-grained sediments which are supplied from Yellow river or Korea Peninsula are restricted transportation to outer shelf and orderly sedimentation on continental margin and resuspension. Thus it is probably that fine-grained sediments from Yellow river and Korea peninsula are concentrated in sequently and reworked - not supply to open sea - and then transported by currents.