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胶州湾沉积岩心化学元素聚集特征

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摘要：

本文对胶州湾沉积岩心B3、C2、C4、B6、D4和D6进行了210^Pb放射活度的测定,在相应的岩层测定了化学元素Ca、K、Li、Mg、Na、Rb、Sr和V。结果表明,^210Pb的分布模式反映了胶州湾不同区域沉积速率和沉积环境。胶州湾沉积岩心中化学元素Ca、K、Li、Mg、Na、Rb、Sr、和V的垂直分布,在不同的区域和不同的地层年代都有明显的变化。胶州湾现在和过去沉积过程中化学元素的聚集速率发生了明显的变化,揭示了采样站位物质来源和沉积环境。反映了近百年来人类工农业活动对胶州湾环境的影响。

关键词：210Pb分布 元素聚集速率 沉积通量 沉积岩心 胶州湾

Chemical Elements Accumulation Characteristics of the Sediment Drill Core in the Jiaozhou Bay

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Abstract:

The ^210Pb activity was measured in cores B3, C2, C4, B6, D4 and D6 of the Jiaozhou Bay and the elements of Ca, K, Li, Mg, Na, Rb, Sr and V were measured in corresponding sediment layers. The results show that the model of ^210Pb distribution reflects the sedimentation rate and sedimentation environment in different region for Jiaozhou Bay. The vertical distributions of Ca, K, Li, Mg, Na, Rb, Sr and V in Jiaozhou Bay core sediments has obvious variety in different regions and at different stratigraphic time. The obvious change of accumulation rate which occurred in sedimentary course at present and foretime reveals the matter source and sedimentation environment of sampling stations, and reflects the influence of industrial and agricultural activity on Jiaozhou bay environment in recent 100 years.

Keywords:^210Pb distributions elements accumulation rate Sedimentation flux sedimentary cores Jiaozhou Bay

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