

AHW026-01

会場:201A

時間:5月27日 14:15-14:30

沿岸地下水中のリン濃度の分布特性 - 水文地質的背景 - Distribution properties of phosphorus concentration in coastal groundwater: hydrogeological background

小野寺 真一^{1*}, 齋藤 光代², 地下 まゆみ³, 清水 裕太¹, 金 広哲¹, 吉川 省子⁴
Shin-ichi Onodera^{1*}, Mitsuyo Saito², Mayumi Jige³, Yuta Shimizu¹, Guangzhe Jin¹, Seiko Yoshikawa⁴

¹ 広島大学大学院総合科学研究科, ² 愛媛大学, ³ 千葉科学大学, ⁴ 農研センター

¹Hiroshima University, ²Ehime University, ³Chiba Science University, ⁴Research Institute of Agriculture

Nutrient condition in water environment controls the ecosystem. Groundwater discharge to the oceans is significant as nutrient supply (Slomp et al, 2004 etc). Especially, phosphorus and silica concentration generally are relatively high in coastal area. However, it has not been enough to confirm the source of phosphorus in coastal groundwater in previous studies. This study aims to confirm hydrogeological properties in coastal groundwaters, and estimate the possible phosphorus sources of groundwater.

The study areas are Osaka, Marugame, Okayama, and Fukuyama alluvial plains and small island groundwaters in Hiroshima prefecture. We arranged hydrogeological and groundwater quality data sets in previous studies of Hiroshima University. The phosphorus concentrations were high in anoxic condition. In addition, shallow aquifers around alluvial clay had high concentrations. The phosphorus contents in alluvial sediments of Okayama plain were relatively high around alluvial clay. These results suggest the contribution of phosphorus from alluvial sediment to groundwater.

キーワード: リン, 沿岸地下水, 水文地質, 堆積物

Keywords: phosphorus, coastal groundwater, hydrogeology, sediment