

## 海底鉄マンガン酸化物の鉄同位体組成 Iron isotopic composition of marine ferromanganese deposits

山岡 香子<sup>1\*</sup>, デイビッド ボロック<sup>2</sup>, 臼井 朗<sup>3</sup>  
Kyoko Yamaoka<sup>1\*</sup>, David Borrok<sup>2</sup>, Akira Usui<sup>3</sup>

<sup>1</sup> 産業技術総合研究所地質情報研究部門, <sup>2</sup> ルイジアナ大学地球科学科, <sup>3</sup> 高知大学地球科学コース

<sup>1</sup>Geological Survey of Japan, AIST, <sup>2</sup>School of Geosciences, Univ. of Louisiana, <sup>3</sup>Earth Science Department, Kochi Univ.

Iron isotopic composition of marine ferromanganese deposits could be a useful tool to understand the cycling of iron in the ocean. Beard et al. (2003) proposed that the iron delivered to the ocean is essentially controlled by the atmospheric particulate flux ( $\delta\text{-}^{56}\text{Fe} = 0$  permil) and the mid-ocean ridge hydrothermal flux ( $\delta\text{-}^{56}\text{Fe} = -0.5$  permil). However, the global dataset of iron isotopic composition for hydrogenetic ferromanganese deposits demonstrated large variations on local scale and no systematic difference between ocean basins (Levasseur et al., 2004). Thus, further studies are needed in order to determine source and precipitation process of iron in marine ferromanganese deposits. In this study, we preliminary analyzed the iron isotopic compositions of hydrothermal ferromanganese crusts, hydrogenetic ferromanganese crusts, and hydrogenetic/diagenetic ferromanganese nodules.

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