

A general overview of the research progress on REY-rich mud

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Deep-sea mud enriched in rare-earth elements and yttrium (REY), termed as REY-rich mud, has been expected as a novel mineral resource for the industrially critical elements [1]. Targeting the Japanese exclusive economic zone around Minamitorishima Island, where highly promising REY-rich mud (total REY content > 5,000 ppm) lies at very shallow depth (2 to 4 m) below the seafloor [2], we have conducted a variety of researches on the mud from both scientific and engineering perspectives.

In the presentation, we report a general overview of the research progress on REY-rich mud, and discuss the importance of the mud from viewpoints of the Japan's resource security and a new strategy for economic growth.

[1] Kato, Y. et al. (2011) Nature Geoscience 4, 535-539, [2] Iijima, K. et al. (2016) Geochemical Journal 50, 557-573.

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