

**Session Title:**

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**Position: Vice Dean, Professor**

**Abstract title:**

REE-rich mud: An innovative seafloor resource for Sustainable Development Goals

**Abstract text (within 100 words):**

Rare-earth elements (REE), essential for various advanced and low-carbon technologies, are an important key to develop a future carbon neutral society. In 2011, our research team discovered deep-sea sediments remarkably enriched in REE around Minamitorishima Island, the easternmost island of Japan. The REE-rich mud can supply a tremendous amount of REE, especially industrially critical heavy REE, without radioactive wastes. In the near future, we aim to establish a new supply chain of REE through the development of REE-rich mud, resulting in a stable supply of REE and revitalization of Japanese industry.