

## Os isotope stratigraphy of ferromanganese crust in the Pacific Ocean and Philippine Sea

Tatsuo Nozaki<sup>1\*</sup>, Kosuke Goto<sup>2</sup>, Ayaka Tokumaru<sup>3</sup>, Yutaro Takaya<sup>2</sup>, Katsuhiko Suzuki<sup>1</sup>, Qing Chang<sup>1</sup>, Jun-Ichi Kimura<sup>1</sup>, Yasuhiro Kato<sup>4</sup>, Gen Shimoda<sup>2</sup>, Akira Usui<sup>5</sup>, Tetsuro Urabe<sup>3</sup>

<sup>1</sup>JAMSTEC/IFREE, <sup>2</sup>AIST/GSJ, <sup>3</sup>Univ. of Tokyo, <sup>4</sup>Univ. of Tokyo, <sup>5</sup>Kochi Univ.

We report the Os isotope stratigraphy of Fe-Mn crusts collected from the Takuyo #5 and MC10 Seamounts in northwestern Pacific Ocean and Ryusei Seamount in the Philippine Sea. Based on the depositional age of Fe-Mn crusts dated by Os isotopes together with major and trace element compositions determined by ICP-QMS analyses, we will discuss growth rate, geochemical signature and genesis of Fe-Mn crusts.

Keywords: ferromanganese crust, geochemistry, Re-Os isotope, Pacific Ocean, Philippine Sea