

The PGE abundances and Os isotope ratios in gabbros from ICDP Oman drilling cores

*Ryoko Senda^{1,2}, Katsuhiko Suzuki², The Oman Drilling Project Phase I Science Party

1. Faculty of Social and Cultural Studies, Kyushu University, 2. JAMSTEC

It is well known that oceanic crust covers almost 70 % of Earth's surface. It is formed at mid-ocean ridge and is subducted into mantle at convergent plate margin. However the details of the oceanic crusts are still poor understanding because they are underlying the sea water. Therefore the construction of the oceanic crusts is defined by constructions of ophiolites which were the ancient oceanic plates exposed onto land.

To have better understandings of the oceanic crust and related other things, the Oman Drilling Project starts the drilling in the oceanic lower crustal section from 2016 to 2017 in Samail ophiolite, Oman. The Samail ophiolite in the Oman is the largest and having better exposed section of the oceanic lithosphere in the world.

This time we will report the preliminary data of the PGE abundances and Os isotope ratios in the whole-rock gabbros and comparing to the data from the other areas and settings. These data will be help us to better understanding of the relationships between the oceanic crust and underlying mantle and planning the future Mohole projects.

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