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SCG067-P05

Room:Convention Hall

Time:May 26 10:30-13:00

## Toward estimation of the tectonic setting for the Horoman peridotite

Chihiro Hoshikawa<sup>1\*</sup>, Shoji Arai<sup>1</sup>, Natsuko Takahashi<sup>2</sup>

<sup>1</sup>Earth Sci., Kanazawa Univ., <sup>2</sup>Earth Sci., Chiba Univ.

The tectonic setting of the mantle from which the Horoman peridotite complex derived has not been thoroughly examined. Rocks of SDW suite can be representative of cumulates from the final melt extracted from the Horoman peridotites (MHL suite). Clinopyroxenes (cpxs) in SDW dunites were examined to estimate chemical properties of equilibrated melt.

Cpxs show modal and chemical heterogeneity in the thickest layer of SDW within the MHL harzburgite, possibly indicating the SDW were not simple cumulates from a batch of melt within a crack. The cpx mode is correlated positively with HREE and Al contents of cpx, and negatively with Fo and Ni content of olivine, indicating crystallization toward cpx-rich parts. The LREE content of cpx increases with an increase of the cpx modal amount, which possibly indicates chemical modification of cpx by interstitial melt. REE contents of cpx also appear changeable depending on the distance from the MHL wall, suggesting reaction with the wall harzburgite.

The melt in equilibrium with cpx shows REE patterns not exactly the same as those from any tectonic settings although a similarity to MORB and IAT was recognized. This is due to chemical modification (enhancement in LREE contents) of cpx by the interstitial melt. We need examine cpx grains from cpx-rich parts (wehrlites).