

## Significance of two types of harzburgite in the northern Oman ophiolite

# Kazuyuki Kadoshima[1], Shoji Arai[2], Kyoko Matsukage[3], Hisayoshi Yurimoto[4]

[1] Dept. Earth Sci., Kanazawa Univ., [2] Dept. Earth Sci., Kanazawa Univ., [3] Institute for Geothermal Sciences, Kyoto Univ., [4] Earth & Planet. Sci., TiTech

<http://kgeopp6.s.kanazawa-u.ac.jp/~kuma>

26

Volcanological and geochemical characteristics of harzburgites in the Oman ophiolite are described in detail to understand how and in what kind of tectonic setting the upper mantle evolved. The harzburgites are widely vary in mineral chemistry and are divided into two groups, 1 and 2. Group1 is characterized by a positive correlation between Cr# of spinel and Fo value of olivine and is strongly depleted in light REEs. Group2 is characterized by a negative correlation between Cr# and Fo value and is slightly enriched in light REEs. Group2 inseparably occurs with/around the discordant dunite. Group1 is devoid of adjacent discordant dunite. Thus, group2 have been possibly modified from group1 by the melt which involved in the formation of discordant dunites.