

## Origin of fertile peridotite body in the middle Andaman ophiolite, India: A Paleo-Indian Ocean?

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We examined petrology and mineralogy of peridotite bodies exposed in the middle Andaman Island, India. The peridotite bodies mainly consist of lherzolite with small amount of dunite bands/pods and clinopyroxenite/gabbroic veins. Major and trace element compositions of minerals in the samples suggest that lherzolites are of simple residue after low-degree of partial melting and are similar to those recovered along the present (Central) Indian Ridges.

The middle Andaman peridotites are thus interpreted to be an example of Paleo (probably Cretaceous age) upper mantle materials beneath the Indian Ocean, now tectonically exposed as a member of the dismembered ophiolite in the Andaman Island. We will also report results of Sr-Nd isotopic compositions of clinopyroxene in the samples.

Keywords: Mid-ocean ridge, melt, peridotite, fertile