

## From mantle material to mantle processes-the fourth International Workshop, 2002, Samani, Japan

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The fourth International Workshop on Orogenic Lherzolite and Mantle Processes is to be held at Samani in 2002. This is an international conference for presenting new data on mantle derived ultramafic rocks and for discussing physical processes in the mantle. The organization committee has set up following four main themes:(1)Origin of heterogeneity of mantle derived ultramafic rocks;(2)Partial melting, melt segregation and modification during magma transport;(3)Deformation microstructure and flow dynamics in the mantle;(4) Recycling of lithosphere and geochemical evolution of the mantle.we describe these topics by referring to published recent works so that the aim of the conference will better be appreciated.

The fourth International Workshop on Orogenic Lherzolite and Mantle Processes is scheduled to be held at Samani, Hokkaido from August 26 till September 3, 2002. This is an international conference for presenting new data and ideas on mantle derived ultramafic rocks and related rocks and for discussing physical processes in the mantle. The "mantle material" includes peridotites masses emplaced in orogenic zones, tectonites in ophiolites, ultramafic and mafic xenoliths carried by basalts and kimberlites. The Japanese organization committee has set up following four main themes for the forthcoming workshop:

- (1) origin of heterogeneity on various scales as documented in mantle derived ultramafic rocks with particular emphasis on mechanisms for forming layered structures;
- (2) mechanisms of melt production and modification of partial melts during melt segregation, melt transport, and mantle-melt reactions;
- (3) rheology of solid and partially molten mantle and large scale flow dynamics in the mantle;
- (4) recycling and processing of lithosphere into the mantle on local and global scales and the geochemical evolution of the Earth's mantle.

As an introduction for the present sessions, we will describe these themes by quoting published recent works on these subjects so that the aim of the conference will better be appreciated. we would like to welcome many contributions from wide range of disciplines such as petrology (igneous, metamorphic petrology and volcanology), geochemistry, structural geology and petrology, geophysics, tectonics. The first circular of the conference is currently presented on web at <http://earth.s.kanazawau.ac.jp/LherzoliteWorkshop2002/>