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Room:Convention Hall

Time:May 24 18:15-19:30

High temperature metamorphism recorded on chromitite samples in drilling cores from ocean floor

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Metag-gabbro and some serpentinites are not only extremely altered, but also metamorphosed at high temperature up to midamphibolite facies. Chromian spinel included in those samples, which is normally well preserved under the condition of ocean floor metamorphism, also metamorphosed into chrome-bearing magnetite and/or magnetite. The crystal orientation varies inside a grain with chemical modification of the metamorphism. We discuss the possibility of such high temperature metamorphism in the deep oceanic plate.

Keywords: chromitite, IODP Exp. 345, high temperature metamorphism, Moho transition zone, oceanic crust, ODP Leg 209

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