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SSS029-P16

会場:コンベンションホール

時間:5月23日 14:00-16:30

## 地震時における粘土鉱物の脱 OH 反応と組織および摩擦滑り特性との関係 Relationship between dehydroxylation reaction of clay minerals and their inner structure and frictional property

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Transient frictional heating during earthquake slip induces dehydroxylation of phyllosilicate minerals. As this reaction is endothermic and releases H<sub>2</sub>O, it may affect dynamic fault weakening and the energetics of earthquakes. To elucidate this question, we measured thermal property, chemical kinetic parameters, and frictional property of dehydrated clay minerals (montmorillonite, illite, and kaolinite), and observed the inner structure under scanning electron microscope. We then discuss the relationship among the reaction, structure (fabrics), and frictional property, and also argue their implications on dynamic fault weakening and energetics during an earthquake.

キーワード: 粘土鉱物, 脱 OH 反応

Keywords: clay mineral, dehydroxylation