Geodynamics Seminar

第369回ジオダイナミクスセミナー

Experimental study on the phase stability and transition of CaSO₄ at high pressure and high temperature

Taku Fujii (Ph.D. student, Ehime University)

主催:愛媛大学地球深部ダイナミクス研究センター

日時:11/1(金)午後4時30分~

場所:総合研究棟 I 4F 共通会議室





Abstract

Studying the mobility of light elements through subduction process is important to understand the whole material cycle in subduction zones. The sulfate minerals which are typically produced around hydrothermal vents on oceanic plates have been thought to play a less significant role in material circulation in those regions, because the most of them are assumed to be trapped by accretion at the edge of continental crusts. However, recently study suggests that most of the sediment on oceanic plates also subducted into the deep earth by tectonic erosion. In addition, the sulfur has been detected in many fluid/mineral inclusions in minerals from the upper mantle. The aim of this study is to investigate the stability and reactively of sulfate minerals in the mantle condition through high pressure and high temperature experiments. Here we present experimental results on the phase relations of anhydrite at high pressure below 10 GPa.

詳細は当センターホームページ: http://www.ehime-u.ac.jp/~grc/をご覧ください 問い合わせ先: 出倉 春彦(TEL:089-927-8408,e-mail:dekura@sci.ehime-u.ac.jp)