Geodynamics Seminar

第311回ジオダイナミクスセミナー

(19th Global COE Special Lecture)

The relationship between water content and Al-content in the MTZ and the lower mantle minerals

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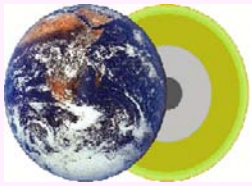
主催：愛媛大学地球深部ダイナミクス研究センター
日時：12/2（金）午後 4時30分～
場所：総合研究棟 4F 会議室



EHIME UNIVERSITY GRC GEODYNAMICS RESEARCH CENTER

Abstract

Water is an important volatile component in the Earth mantle, and many high pressure experiments have been conducted so far to determine the stability region of both dense hydrous magnesium silicate (DHMS) and nominally anhydrous minerals with some water.

Al^{3+} is supposed to be coupled with H^{+} by a substitution with Mg^{2+}, Si^{4+} or Mg^{2+} + Si^{4+}. To clarify the degree of the substitution, the water contents and the chemical compositions of Al-bearing minerals were determined in the conditions corresponding to the mantle transition zone (MTZ) and the lower mantle. The results of Mg-silicate perovskite, stishovite, garnet and phase D will be presented.

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
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