## Geodynamics Seminar

## 第378回ジオダイナミクスセミナー

## Alphabet phases and the discovery of phase H: A historical view

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日時:3/7(金)午後4時30分~場所:総合研究棟4F会議室





## **Abstract**

Based on a prediction by J. Tsuchiya (2013), Nishi et al. (2014) found a new dense hydrous magnesium silicate (DHMS), named as phase H, which is potentially important in transportation of water into deep lower mantle and thereby influences some physical properties and dynamics/structures of the deepest region of the mantle. High-pressure forms of DHMS are sometimes referred to as "alphabet phases", as they are named in alphabetical order, such as phases A, B, C, etc. There have been some debates as to the actual presence and nomenclature of these phases, particularly those on phase D, another DHMS which is stable in the upper parts of the lower review the history of synthesis and mantle. Here characterization of alphabet phases with some emphasis on the phase D issue that I myself was heavily involved in order to avoid possible future confusions/confrontations around phase H.