Frontiers in Geochemistry: Innovative approaches for Earth and Planetary Sciences

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11:00 AM - 12:45 PM

A variety of innovative researches have been emerged in earth and planetary sciences by virtue of the development of new chemical methods associated with novel approaches. To conduct more detailed and complicated investigation in modern geosciences, highly precise and accurate scientific data are badly needed. This session is aimed to provide an opportunity to gather various geoscientists to have a strategic discussion on geochemical frontier, especially by people who work on devising new geochemical methods as well as those who would like to apply such innovative techniques. We welcome a wide range of cutting-edge geochemical topics regarding technical development, including exploratory researches that can potentially be a breakthrough of earth and planetary sciences.

11:45 AM - 11:55 AM

Simple method for separation of boron from volcanic rocks for isotopic analysis by MC-ICP-MS

Ryuichi SHINJO, Yukinori HAMADA

We developed a simple and thus effective method of separation of boron from volcanic rocks. It has been suggested that easy volatilization of boron and isotopic fractionation during evaporation step after HF decomposition of silicate rock samples; therefore procedure of evaporation at low-temperature (80%). To evaluate our method, the GSJ rock standards (JB-2, JB-3 and JR-2) were analyzed by following the proposed method. Measured boron isotopic compositions for these rocks were in good agreement with preferred values.