International Session (Oral) | Symbol S (Solid Earth Sciences) | S-CG Complex & General

[S-CG08_29AM1] Collision, Subduction, and Metamorphic processes-II

Convener:*Hafiz Ur Rehman (Department of Earth and Environmental Sciences, Graduate School of Science and Engineering, Kagoshima University), Tatsuki Tsujimori (Institute for Study of the Earth's Interior, Okayama University), Kazuaki Okamoto (Faculty of Education, Saitama University).
Chair: Rehman Hafiz Ur (Department of Earth and Environmental Sciences, Graduate School of Science and Engineering, Kagoshima University), Chunjing Wei (School of Earth and Space Sciences, Peking University)

Tue. Apr 29, 2014 9:00 AM - 10:45 AM  311 (3F)

This session is the continuation of last year's JPGU 2013's international symposium "Collision, Subduction, and Metamorphic processes". The symposium is aimed at considering the processes involved with the continental collision, slabs subduction and related metamorphic processes. The multidisciplinary approach will be applied to extract the information preserved in various rocks and minerals via structural, geophysical, petrologic, geochemical and experimental studies. These include formation processes of new minerals/textures, their growth history and recrystallization, inclusion morphology, and metamorphic reactions. Topics related to rocks and minerals formed in the processes of continental collisions, oceanic subductions, and regional metamorphisms are most welcome from the major orogenic belts worldwide. Topics in this session also include links between hydration and dehydration along the subduction channels, cycling of continental crust, deformation mechanisms in the subduction, collision regimes, formation and exhumation of various metamorphic rocks such as granulites, blueschist and HP/UHP eclogites and other metamorphic rock types. The session also aims at exchanging ideas among geoscientists applying different approaches on problems related to the subducting slabs, collision boundaries and related metamorphic processes. New works with novel or interdisciplinary techniques to the related theme are especially welcomed.

9:00 AM - 9:15 AM

[SCG08-P03_PG] Zircon Nano-SIMS U-Pb dating from the country gneiss beside Horoman peridotite, Hokkaido, Japan

3-min talk in an oral session

Ryosuke SUZUKI¹, *Kazuaki OKAMOTO² (1.Saitama university, Japan)
Keywords: Zircon, U-Pb, Nano-SIMS, Horoman peridotite, country gneiss, juxtaposition age

Hidaka Metamorphic Belt, Hokkaido, Japan includes the youngest granulites and the Horoman peridotite complex in the highest grade zone. Age of the Hidaka gneiss and amphibolite have been determined by various methods (e.g. K-Ar, U-Pb, Rb-Sr and etc). However, the age of Horoman peridotite complex has not been determined yet. Only Yoshikawa et al (1993) reported the cooling age of the complex as 23 Ma based on whole rock Rb-Sr isochron method. This study performed U-Pb dating of zircons from the paragneiss surrounding the Horoman peridotite complex in order to determine the intrusive age of the Horoman peridotite complex from the upper mantle into the lower crustal conditions. The zircons have detrital cores and thin rims (