

International Symposium

Gondwana and Island Arc: Past and Present

Date: Tuesday, March 4, 2014; 9:00 - 17:00

Venue: 515 EIS-1, Yokohama National University

(OPEN TO THE PUBLIC, ADMISSION FREE)

Sponsored by JSPS Grants-in-Aid for Scientific Research (2340301) "Petrogenesis of Carbonates in the Proterozoic Southern Madagascar"
Cospponsored by Graduate School of Environment and Information Sciences, Yokohama National University

OBJECTIVE:

Gondwana included most of the landmasses in today's Southern Hemisphere, including Antarctica, South America, Africa, Madagascar and the Australian continent, as well as the Arabian Peninsula and the Indian subcontinent, which have now moved entirely into the Northern Hemisphere. One of the most popular theories of continental growth suggests formation of continents by amalgamation of Island Arcs at the collision zones. Understandably, the geology of island arc systems is of paramount importance to understand the growth and evolution of continental blocks that ultimately joined to produce supercontinents like Gondwana in the earth history. The purpose of this symposium is to exchange views and ideas among researchers working on the Precambrian geology of the continents and the Phanerozoic Island Arc systems of Japan.

Program

Welcome

9:00-9:20 Prof. Makoto Arima (Yokohama National University, Japan)

Gondwana

9:20-9:50 **Invited: Gondwana to Asia: Multiple continental collision and related metamorphism during the Asian continental growth**
Prof. Yasuhito Osanai (Kyushu University, Japan)

9:50-10:10 **Sedimentology of Paleoproterozoic Turee Creek Group of rocks, Western Australia**
Dr. Rajat Mazumder (University of New South Wales Kensington, Australia)

10:10-10:30 **Mineralogical and geochemical study of inter-basaltic, clay rich horizons from Chhindwara-Mandla section of Eastern Deccan Volcanic Province: Implications for palaeoclimate and weathering processes during Deccan volcanism**
Dr. Vivek P. Malviya (Geological Survey of India)

(10min break)

10:40-11:00 **High-pressure and Ultrahigh-temperature metamorphism at Diguva Sonaba, Eastern Ghats Mobile belt (India): New constraints from phase equilibria modeling**
Dr. Divya Prakash (Banaras Hindu University, India)

11:00-11:20 **Beauty of saikenite rocks in southern Madagascar: thier occurrence, petrography and origin**
Prof. Raymond Rakotondrzafy (University of Antananarivo, Madagascar)

11:20-11:40 **Madagascar and the EAO (East Africa Orogen) during the assembly of Gondwana East and West**
Dr. Roger Rabeloson (University of Antananarivo, Madagascar)

11:40-12:00 **Geology, geochemistry and geochronology of east-central Madagascar**
Mr. Takashi Ichiki (Yokohama National University, Japan)

(Lunch break)

13:00-13:20 **The Kibaran tin and Columbite-Tantalite Province in eastern D.R. Congo: structural control, Cassiterite SHRIMP vs K-Ar geochronology and implications to Rodinia and Gondwana tectonics**
Prof. Joseph Kokonyangi (Member of Lower House of the Parliament, Democratic Republic of the Congo)

13:20-13:40 **Crustal growth of the Ntem Complex, South Cameroon: An insight from zirconology**
Dr. Francis T. Takam (Bureau de l'exploration géologique du Québec, Canada)

13:40-14:00 **SHRIMP zircon dating: New evidence of metamorphosed Archaean crust in Southern Madagascar**

Dr. Thierry O. N. Rakotonandrasana (Yokohama National University,

14:00-14:20 **Carbonatite and associated phlogopitite-pyroxenite intrusions along the Beraketa mega shear zone, in the Proterozoic southern Madagascar: Geochemical, O- and C- stable isotopes and Sr- and Nd-isotopic characteristics**

Ms. Marinah A. Ranaivoson (Yokohama National University, Japan)

14:20-14:40 **Experimental studies on the origin of sapphire deposits in Gondwana fragments: Interaction between pelitic granulite and marble**

Dr. Mutsumi Kato (Chiba University, Japan)

(10min break)

Island Arc

14:50-15:20 **Invited: Mass balance of an arc: hot versus cold subduction cases**
Dr. Jun-ichi Kimura (JAMSTEC, Japan)

15:20-15:40 **Petrogenesis of Neogene granitoid plutons in the Izu Collision Zone: implications for evolution of juvenile oceanic arc into mature continental crust**

Dr. Satoshi Saito (Ehime University, Japan)

15:40-16:00 **Spatial and temporal variations of stress field and volcanic activity in the South Fossa Magna region**

Dr. Shin'ich Mori (Hiratsuka City Museum, Japan)

16:00-16:20 **Petrogenesis of oxide gabbro from an oceanic core complex in the Parece Vela back arc basin, Philippine Sea**

Mr. Hiroyuki Yamashita (Kanagawa Prefectural Museum, Japan)

16:20-16:40 **Mesozoic eastern Tethys margin: Birthplace of the Izu-Bonin-Mariana Arc**

Dr. Kenichiro Tani (JAMSTEC, Japan)

Open Discussion

16:40-16:55 **Gondwana and Island Arc: Past and Present**

Coordinator: Dr. V. P. Malviya and Dr. S. Saito

Closing Remark

16:55-17:00 Prof. Makoto Arima (Yokohama National University, Japan)

Banquet (17:30-19:30)

Dean of Graduate School of Environment and Information Sciences, YNU cordially invite all participants to the Banquet held at University Hall, Restaurant "Party".

Contact (conveners) :

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