

NEWS AND NOTES

7th International Symposium 'Gondwana to Asia' and 2010 IAGR Annual Convention – T.R.K. Chetty (NGRI, Hyderabad; E-mail: trkchetty@gmail.com)

The 7th International Symposium was held during 25-30 September, 2010 at P.R. China, organized by the College of Marine Geosciences, Ocean University of China, Qingdao, China. The major themes of the scientific sessions include: (1) Asian Continental Growth: From Archean to Cenozoic. (2) Asian Assembly and Destruction: From Supercontinent to Superplume. (3) Within Asian Continent: Orogens, Basins and Their Resources. (4) Beneath Asian Continent: From Mantle to Crust. (5) Peripheral Asia: Evolution of West Pacific Continental Margins and Marginal Seas. (6) All topics including geophysics, paleontology, sedimentology, and its applications to tectonics.

There were 126 delegates 12 different countries. There were 68 oral- and 20 poster- presentations, covering the latest information and views of different aspects of the themes related to Gondwana geology and providing state-of-the-art reviews. During the Conference, the Gondwana Research (GR) best paper award for the year 2009 was presented to Dr. Shinji Yamamoto and co-authors.

During the two-day technical sessions, there were 10 keynote presentations dealing with thematic issues on the evolution of orogenic belts on our planet through time which is of current global interests and relevance. The following is the gist of the keynote presentations.

Santosh elaborately described the accretionary tectonics, the hallmark of the continental growth that involves the processes of subduction-erosion, sediment subduction and arc subduction, which play a crucial role in the destruction of the continents. He also highlighted the importance of the Ocean Plate Stratigraphy (OPS) that helps in recognizing the modern analogues for the Precambrian tectonic processes.

Mingguo Zhai described the occurrence, distribution metamorphic history and isotropic ages of High Pressure

(HP) and Ultra High Temperature (UHT) granulites of north China craton and presented several collisional models. He emphasized the strong need for the existing geological and tectonic models.

Inna Safonova presented the details regarding the plume related oceanic magmatism in association with the typical units of Ocean Plate Stratigraphy (OPS). She also invoked Paleo-Asian and Paleo-Pacific Oceans after studying the accretionary complexes of Central and East Asia. She emphasized the intra-plate magmatism during late Neoproterozoic-Permian in Paleo-Pacific Ocean, which was accreted to active continental regions.

Brian Windley and his co-authors presented comprehensive model for extensive thinning and de-lamination of sub-continental lithosphere during Cretaceous for the Eastern China. They emphasized the role of hydration in lowering the Solid Earth Temperature of hydrous mantle periodite, extensive melting, eclogitization of the thickened deep crust resulting in voluminous magmatism, mafic, adakitic and granitic intrusions and extensive gold mineralization.

Yong-Fei Zheng and his co-authors described the formation and evolution of the Dabie-Sulu orogenic belt of Eastern China with focus on the findings of Coe-site and micro-diamonds as inclusions in metamorphic minerals from eclogites. Based on the whole rock Sm-Nd and zircon Lu-Hf isotope studies of Ultra High Pressure (UHP) eclogites, they proposed that their proto-liths were principally derived from partial melting of the sub-continental lithospheric mantle rather than the asthenospheric mantle, excluding the possibility of the subduction of oceanic crust.

Junlai Liu and others described the structural analysis Sm-Nd and Lu-Hf geochemistry has identified two types of Cenozoic leucocratic intrusions along the ~1000 km long Ailao Shawn-Red River

shear zone, the largest geological discontinuity in South East Asia. They have also concluded that the shearing along the shear zone is co-eval with the magmatism between 27 Ma and 21 Ma.

Jason Ali and others presented the synthesis of all the available bio-litho-stratigraphical, petrological, geochemical, and volcanological information and inferred that the Emeishan Large Igneous Province was generated by a plume that originated in the mantle. They also remarked that large scale doming is not a diagnostic feature of mantle plumes and the surface topography can greatly be influenced by the type of lower mantle plume how it interacts with lithosphere!

Michel Faure and others described Red River Fault that separates the South China from Indo-China block. They described field observations, geochemical signatures of basalts and gabbros and interpreted that they have formed by intra-plate magmatism. However, ophiolites and accretionary complexes have been described in nearby areas but the presence of Permian mafic rocks formed by intra-plate magmatism related to plume tectonics is also known.

Prodip Dutta and his co-workers attempted to resolve the century old stratigraphic controversy amongst the Gondwana basins of Peninsular India. The stratigraphic successions and the presence of Permian flora are incompatible in different Gondwana basins. Based on the field seminar to study the order of superposition along three critical sections, they claimed that they have collectively confirmed the identical stratigraphic sections to settle the controversy.

Zhen-Xian Li and David Evans described the Paleo-magnetic pole positions from different cratons of Australia and the role played by a mega shear zone along the Paterson and Musgrave Orogens and inferred 40 degree clock-wise rotation of South Australia craton relative to North Australia craton during 550 Ma. They have

compared the Proterozoic Paleo-pole positions between Australia with those of Laurentia and suggested that Rodinia probably did not break apart until ca 650 Ma and, thus, agreeing with the stratigraphically estimated rift-drift transition time.

Some of the important themes that were presented and discussed in other technical sessions include: (i) Diversity of internal structure and geochemical compositions of Phanerozoic as well as Precambrian ophiolites, (ii) Processes of continental decrease in subduction zones and their implications on mantle dynamics, (iii) Recognition of High Pressure granulites and Ultra High Temperature (UHT) assemblages in several modern and ancient

orogenic belts leading to new concepts in their tectonic histories, (iv) Growth of Archaean lower continental crust and possible arc accretionary models, (v) Study of suture zones with the aid of Zircon LA-ICP-MS U-Pb geochronology, (vi) Study of Neoproterozoic supra subduction ophiolites along several modern orogenic belts in Asia, (vii) Magmatism, deformation and metamorphism of different craton and their implication in the reconstruction modes of supercontinent, (viii) Age constraints and Pressure-Temperature history of rocks from several collisional belts, (ix) Platinum group of elements and gold mineralization, (x) Tectonic evolution of orogenic belts, (xi) Paleo-Oceans and subduction zones, (xii) Thermal state and structure of litho-

sphere beneath the continent, (xiii) Constraints from Zircon U-Pb age and Hf-O isotopes, (xiv) Accretionary/collisional tectonic models and Phanerozoic orogenic belts.

The Conference was followed by a two-day field excursion mainly concentrated on the high-pressure metamorphic rocks in the Sulu Orogen of the Shandong Peninsula that provide an opportunity to see HP/UHP rocks around the Mesozoic Sulu belt and HP granulites in the Paleo-Proterozoic Jiao-Liao-Ji belt.

The delegates enjoyed the hospitality provided by a team of scientists from the Ocean University of China. The organizers deserve compliments from all the delegates for their well-planned organization.