## 12th INTERNATIONAL SYMPOSIUM ON 'GONDWANA TO ASIA', IAGR-2015, JAPAN

## **D.P. Mohanty**

Department of Geology, Savitribai Phule Pune University, Pune-411007 (Email: dpmohanty@unipune.ac.in )

The 12th International Symposium on 'Gondwana to Asia' of the International Association for Gondwana Research (IAGR) 2015 was held in the University of Tsukuba, Ibaraki, Japan, during October 21-25, 2015. The conference was organized by Prof. T. Tsunogae and his colleagues of Faculty of Life and Environmental Sciences, University of Tsukuba. The symposium started with a welcome reception and icebreaker on 21st October and the technical sessions were organized for two days on 22<sup>nd</sup> and 23<sup>rd</sup> October, 2015 with oral and poster sessions at the University Hall. There were 95 delegates, from 16 countries (Algeria, Australia, Bangladesh, Canada, China, Hong Kong, India, Japan, Nigeria, Russia, South Korea, Sri Lanka, Taiwan, Thailand, Turkey and USA). The details of technical sessions, abstract volume and the Field Excursion guide were provided to delegates fifteen days before the conference. The Conference focused on a wide range of topics and the focal themes include: (i) Gondwana amalgamation and supercontinent tectonics, (ii) Convergent Margin Tectonics and Geophysics, (iii) Continental Construction in Central and East Asia and (iv) Magmatism and Metallogeny.

The inaugural session of the conference, chaired by Prof. Ismail Hossain, was started on 22<sup>nd</sup> October, 2015, with a welcome address by the secretary general of IAGR, Prof. M. Santosh. This was followed by the inaugural address by Prof. Keni-ichiro Hisada, Head, Department of Earth Evolution Sciences, University of Tsukuba. Prof. Guochun Zhao, president of IAGR, gave welcome speech , which was followed by the vote of thanks by the convener Prof. T. Tsunogae. The technical sessions of oral presentations were designed based on recent significant themes; each one is preceded with one or two key note presentations by renowned geoscientists. There were a total of 8 key note addresses. The first technical session was on Gondwana amalgamation and supercontinent tectonics and was chaired by Prof. Yunpeng Dong & Dr. Tomokazu Hokada in the first half and by Prof. Joseph Meert & Dr. D.P. Mohanty in the second half. The first keynote talk was on 'The ultra-hot Gondwana crust' by M. Santosh. He focused on the conception of ultra high temperature

(UHT) mineral assemblages with special reference to Southern Granulite Terrane (SGT), Peninsular India. According to him, the widely separated UHT localities in different tectonic domains with protoliths derived from differently aged sources display a common extreme thermal event during 521-546 Ma, with their correlation with similar aged UHT rocks in the adjacent crustal fragments. Joseph Meert in his keynote talk on "Biological, Geophysical and Tectonic Transitions during the Assembly of Gondwana" speculated about a possible link between a low dipole magnetic intensity (and rapid field reversals), the destruction of a young ozone layer and the biological changes that took place during the interval of Late Ediacaran Period and into the early part of Cambrian (550-529 Ma). In the third keynote talk, Stephen T. Johnston on "Variscan Oroclines: Implications for Gondwana and Pangea" stressed on the implications of mapview bends (oroclines) of the Carboniferous Variscan orogen, the orogen referred to record the Pangea forming Gondwana-Laurussia continental collision upon closure of an intervening Rheic ocean. The second technical session, under the theme of "Convergent Margin Tectonics and Geophysics" was chaired by Prof. M. Santosh & Dr. E. Shaji in the first half and by Prof. Stephen Johnston & Dr. Sanjeewa Malaviarachchi in the second half. There were two key note presentations in the session. First was on "Tectonic architecture and multiple orogeny of the Qinling Orogenic Belt (QOB), Central China" by Yunpeng Dong. He pointed out that the QOB represents a composite orogenic belt that witnessed four major episodes of accretion and collision between discrete continental blocks. In the last keynote address on "Seismic tomography and mantle dynamics", Dapeng Zhao has detailed about a new global P-wave tomography approach, using a flexible-grid parameterization. He opines that the new model better reveals the mantle structure under the Polar Regions than the previous tomographic models.

Second day of the IAGR symposium-2015 started with a keynote address by I. Safonova on "Recognizing OIB and MORB in accretionary complexes: a new approach based on ocean plate stratigraphy, petrology

and geochemistry". The first half of technical session 3 on 'Continental Construction in Central and East Asia' was chaired by Prof. Bor-ming Jahn & Dr. Xian-Hua Li. According to Safanova, the proposed reconstruction of the tectonic settings of basalts is linked to their relationships with associated Ocean Plate Stratigraphy (OPS) sediments, their petrogenesis and geochemical features. They have recognized five types of OPS in the accretionary complexes of SW Japan. This was followed by another keynote by Wenjiao Xiao on "Accretionary and Collisional Tectonics of SW Iran" .From their new detrital zircon age populations and provenance of samples from the Zogros Orogen in Lurestan Province, SW Iran, it is suggested that the initial continental collision might have happened between 11.2-5 Ma. The last keynote talk of the conference was delivered by Sheng-Rong Li on "The 'Jiaodong type' gold deposits: Metallogenic response to craton destruction". This was delivered in the technical Session 4, under the theme of 'Magmatism and Metallogeny', which was chaired by Prof. Guochun Zhao and Mr. Emmanuel N. Ugwuonah. Li presented newly reported unique class of gold mineralization , which includes the Linglong type quartz vein hosted and the Jiaojia type fractureddisseminated style deposits. He also explained the fault valve model for the formation of the Linglong type of gold ore.

In addition to these keynote addresses, there were many other remarkable presentations on the periodicity of mantle plumes, Paleoproterozoic orogenic processes, double sided subduction zones, structural styles in accretion tectonics, collisional processes, Precambrian crustal evolution, Zircon U-Pb geochronology, tectonics of Central orogenic belt and several other important topics of current interest of earth scientists. Besides the oral presentations, 56

posters were exhibited/presented . The posters were mainly presented by master's and doctoral students. Out of them one was selected for the best student poster award and two more as runners up. Mr. Li Tang for his paper "Paleoproterozoic (ca 2.1-2.0 Ga) arc magmatism in the Fuping Complex: implications for the tectonic evolution of the Trans-North China Orogen" was ajudged as the best poster presenter .

A two day post-conference field excursion to the Boso Peninsula was organized during 24-25 October by Prof. T. Tsunogae and his students. The field excursion provided opportunities for the participants to see accretionary orogenesis and ongoing plate tectonic processes. The localities included ophiolites, pillow basalts, greenstones and sedimentary sequences showing various interesting structures.

The IAGR annual convention and international conference provide opportunities to meet and interact with world renowned geoscientists, for the exchange of scientific ideas and for the growth of excellence in academic and scientific pursuits. Gondwana Research -2014 Best Paper Award Ceremony was one of the most important and inspiring occasions of the conference. The award including medal and citation from IAGR and certificates from Elsevier were conferred to Prof. Xian-Hua Li and co-authors. The IAGR General Assembly and Council Meeting, Gondwana Research Editorial Board meeting and other business meetings (IGCP 592, IGCP 628) were also held during the conference. In the meeting it was also declared that the IAGR-2016 will be held at Trivandrum, India and will be hosted by Dr. E. Shaji of Kerala University. All the delegates carried home their sweet memories. The organizers Prof. T. Tsunogae of Tsukuba University and his team members deserve many accolades.

