

Activities of Asian Cretaceous IGCPs: IGCP608 and its predecessor programs

*Hisao Ando¹

1. Department of Earth Sciences, College of Science, Ibaraki University

The IGCP608 (2013-2017) is now ongoing the forth-year activities after the project proposal approval by UNESCO-IGCP office in March, 2013. In this talk, H. Ando as a project leader briefly reviews the current status of IGCP608 activities and its predecessor programs.

The project is entitled "Cretaceous Ecosystems and their Responses to Paleoenvironmental Changes in Asia and the Western Pacific", and shortly "Asia-Pacific Cretaceous Ecosystems". In this project, the spatio-temporal paleoenvironmental and paleoecosystem changes during the Cretaceous in the South to East Asia and Western Pacific region have been delineated on the basis of paleoproxy data and a diversified fossil record from wider areas and different locations. This project comprises two groups of major topics to be discussed: 1) Variations of Cretaceous terrestrial and marine environments, and 2) Evolution of Cretaceous terrestrial and marine ecosystems in Asia and the Western Pacific. The terrestrial strata widely distributed in South and East Asia yield abundant indicators, both biotic and lithologic, that are essential for deciphering how the ecosystems were affected by paleoclimatic and paleoenvironmental changes.

The project has an important role in promoting communication at the level of geoscience among the various (over fifteen) Asian countries and half a dozen countries outside Asia, following the pattern of previous East Asian Cretaceous IGCPs: 245 (1987-1991), 350 (1993-1998), 434 (1999-2004) and 507 (2006-2011). Therefore, our Asian Cretaceous geoscience community has been continued over 30 years since late 80's.

The First International Meeting of IGCP608 was held at Birbal Sahni Institute of Palaeobotany (BSIP), Lucknow, India, from December 20-22, 2013. The current knowledge of Cretaceous geology and paleontology in Asia, especially south Asia was reviewed in the symposium and the subsequent four-days field excursion to Cretaceous Bagh-Lameta sequences in the western part of the Narmada basin of Central and Western India. The Second Meeting (September 4-10, 2014, Waseda University, Tokyo, Japan) and post-symposium field trip brought together more than 90 earth scientists from 13 countries, including graduate students and representatives of petroleum and resources companies. Session themes include OAEs, land-ocean linkage, Asian geoparks highlighting Cretaceous, etc. In a post-symposium four-day field excursion, we focused the forearc basin siliciclastic successions exposed along the Pacific coast 100 to 250 km east to northeast from Tokyo. The third year activity was held as a Joint Meeting with MTE-12 (The 12th Symposium on Mesozoic Terrestrial Ecosystems) in Shenyang, Liaoning Province, China, during 16-18 August 2015. The two-days field excursion visited and observed the Early Cretaceous "Jehol Biota" and Jurassic "Yanliao Biota" in Western Liaoning very famous in feathered dinosaur faunas.

This year we will hold the Fourth Meeting in Novosibirsk, Western Siberia situated nearly at the center of Russia during 15-20 August 2016. The post-symposium excursion will visit the Early Cretaceous dinosaur localities now excavated, where is very important for reconstructing the terrestrial paleoenvironments and ecosystems in central to east continental Asia. Furthermore, the Joint Symposium with IGCP609 and ICDP Songliao Basin is scheduled in 35th IGC, Cape Town, South Africa during 27 August to 4 September 2016.

Several our scientific results during 2013 and 2015 will be published in the thematic section of "Island Arc", Wiley online journals. Our project information including meetings and publication lists has been frequently updated on the project website (<http://igcp608.sci.ibaraki.ac.jp/>) with links to IGCP609 and 632, as well as Geoparks, some scientific organization and societies. This

website acts as a platform to recognize our IGCP608 activities for public as well as members.

Keywords: IGCP, Cretaceous, Asia, IGCP608, ecosystem, paleoenvironmental changes