

*JAPAN CONTRIBUTION TO THE IGCP 2014*

**(International Geoscience Programme)**

**ACTIVITY REPORT in 2014**



**January 2015**

**Japan National Committee for IGCP**

# **1. Japan National Committee for IGCP (International Geoscience Programme)**

## **Until 30 September 2014**

Prof. Hiromichi Hirano, Chairman (until 5 May 2014)

Department of Earth Sciences, School of Education, Waseda University

Nishiwaseda 1-6-1, Shinjuku, Tokyo 169-8050, Japan

Phone: (+81)-3-5286-1516, Fax: (+81)-3-3207-4950, E-mail: hhirano@waseda.jp

Dr. Yoshiki Saito, Secretary (Acting Chair from 7 May 2014 to 30 September 2014)

Geological Survey of Japan, AIST, Central 7, Higashi 1-1-1, Tsukuba 305-8567, Japan

Phone: (+81)-29-861-3895, Fax: (+81)-29-861-3747, E-mail: yoshiki.saito@aist.go.jp

## **Members**

Dr. Kanao Masaki (559 & National Institute of Polar Research)

Dr. Takashi Azuma (567)

Prof. Ryuji Tada (581)

Dr. Kiichiro Kawamura (585)

Dr. Yuki Sawai (588)

Prof. Katsumi Ueno (589)

Prof. Hisao Ando (608)

The committee consists of Chairman, Secretary, national representatives of participating IGCP projects, and guest members of related organizations.

## **After 1 October 2014**

Dr. Yoshiki Saito, Secretary (Chairman)

Geological Survey of Japan, AIST, Central 7, Higashi 1-1-1, Tsukuba 305-8567, Japan

Phone: (+81)-29-861-3895, Fax: (+81)-29-861-3747, E-mail: yoshiki.saito@aist.go.jp

## **Members**

Dr. Kanao Masaki (National Institute of Polar Research)

Dr. Kiichiro Kawamura (585)

Dr. Yuki Sawai (588)

Prof. Katsumi Ueno (589)

Prof. Hisao Ando (608)

## ***Activities in 2014***

It is very sad that we have to report that Chairman, Prof. Hiromichi Hirano of Waseda University passed away on 5 May 2014. He was the Leader of IGCP-434, Land-Ocean Interaction during the

Cretaceous in Asia (1999-2004), and chaired Japan National Committee for IGCP since 1 October 2011.

Official meetings of the committee were not held in 2014. Annual meeting of IGCP-608 was successfully held at Waseda University in Tokyo on 4–6 September 2014, with 92 registered participants from 13 countries. Detailed report is shown in IGCP-608 report.

## **2. National Participation in IGCP Projects**

### **IGCP-585: Earth's continental MARGins: aSsessing the geoHAzard from submarine Landslides (E-MARSHAL) (2010–2014)**

**Project Leader: Roger Urgeles (CSIC), David Mosher (GS Canada), Jason Chaytor (USGS), Michael Strasser (ETH Zurich)**

**National Working Group Leader: Dr. Kiichiro Kawamura, Yamaguchi University, 1677-1 Yoshida, Yamaguchi, Japan**

**Phone: +81-83-933-5750, Fax: +81-83-933-5750, e-mail: kiiichirokawamura@gmail.com**

#### ***Main object of the project:***

The aims of the project are: 1) Strengthen cooperation with deep subsurface sampling and monitoring programmes and eventually lobby within these programmes to create awareness into the topic of submarine slope failures that might lead to drilling and/or monitoring proposals being funded. 2) Provide a lobbying platform for E-MARSHAL members to national and international funding agencies to fund scientific projects in this research topic. 3) Promote the publication of scientific articles and books on this submarine geohazard that contribute to the following societally relevant problems. 4) Identification of the causes of submarine landslides and their consequences. 5) Provide advice on mitigating their impacts. 6) Provide data (frequency, magnitude, ...) that allow probabilistic approaches to the geohazard from submarine landslides and therefore a better management of the seafloor and coastal areas. 7) Promote events that enhance the exchange of results and scientific ideas on the problems above. 8) Provide knowledge transfer to developing countries. Improve the links between academia, industry and public administrations in order to create partnerships to address the topic of geohazards from submarine landslides and to develop methods for transferring knowledge to end-users.

#### ***Meetings held during 2014 or Japanese participation in the project meeting:***

We have done following two sessions in 2014. 1) The influence of the lateral and temporal variability of contourite sedimentation on slope instability, at the 2<sup>nd</sup> Deep-Water Circulation Congress (September 10 to 12), 2) S7 Turbidity current, subaqueous mass flow and mass movement processes: recent insights and future research directions, at International Sedimentological Congress (August 18). But there were no Japanese contributions to these meetings.

#### ***The number of Japanese working group members:***

Japanese working group of IGCP-585 is not officially organized. We are planning to make a mailing list to address related international and domestic meetings.

#### ***Activities planned in 2014 or later:***

We submitted a new project (named S4LIDE; Significance of Modern and Ancient Submarine Slope Landslides), which is associated with submarine landslides and related topics. Dr. Yasuhiro Yamada (JAMSTEC) is one of the lead proponents.

## **IGCP-588: Preparing for coastal change. A detailed process-response framework for coastal change at different timescales (2010–2014)**

**National Working Group Leader: Dr. Yuki Sawai, Geological Survey of Japan, AIST, Site Central 7, Higashi, 1-1-1, Tsukuba, Ibaraki, 305-8567 Japan**  
**Phone: +81-29-861-3713, Fax: +81-29-861-3807, e-mail: yuki.sawai@aist.go.jp**

### ***Main object of the project:***

This project focuses on the impact of humans on coastal landscapes at different timeframes. The project comprises three themes; (1) Catastrophic events, (2) Sea-level "fingerprints" and their implications for future coastal change, and (3) Sea-level changes over geological timeframes - investigating the role of humans. The aim of this project is to not only examine the past and present coastal dynamics and evolution, but to also incorporate predictive modeling of the coastal response to changing climates, anthropogenic impacts and natural hazards.

### ***Meetings held during this year or Japanese participation in the project meeting:***

There were no participants for an annual business meeting in Alaska, USA from the 3rd to 10th May, 2014.

In addition to the annual meeting, another related scientific meetings were held during Asia Oceania Geoscience Society in Sapporo, Japan in August and AGU fall meeting in San Francisco, USA in December. In these two meetings, oral and poster presentations by ten Japanese researchers for each meeting were provided.

### ***The number of Japanese working group members:***

Japanese working group of IGCP-588 is not officially organized.

### ***Publications:***

Furusato, E., Tanaka, N. (2014) Maximum sand sedimentation distance after backwash current of tsunami; simple inverse model and laboratory experiments. *Marine Geology*, 353, 128-139.

Goto, K., Ikehara, K., Goff, J., Chague-Goff, C., Jaffe, B. (2014) The 2011 Tohoku-oki tsunami -3 years on-. *Marine Geology*, 358, 2–11.

Goto, K., Hashimoto, K., Sugawaran D., Yanagisawa, H., Abe, T. (2014) Spatial thickness variability of the 2011 Tohoku-oki tsunami deposits along the coastline of Sendai Bay. *Marine Geology*, 358, 38-48.

Hisamatsu, A., Goto, K., Imamura, F. (2014) Local paleo-tsunami size evaluation using numerical modeling for boulder transport at Ishigaki Island, Japan. *Episodes*, 37, 265–276

Iijima, Y., Goto, K., Minoura, K., Komatsu, G., Imamura, F. (2014) Hydrodynamics of impact-induced tsunami over the Martian ocean. *Planetary and Space Science*, 95, 33–44.

- Kan, H., Urata, K., Nagao, M., Hori, N., Fujita, K., Yokoyama, Y., Nakashima, Y., Ohashi, T., Goto, K., Suzuki, A. (2014) Submerged karst landforms observed by multibeam bathymetric survey in Nagura Bay, Ishigaki Island, southwestern Japan. *Geomorphology*, 229, 112–124.
- Komatsu, G., Kumar, P. S., Goto, K., Sekine, Y., Giri, C., Matsui, T. (2014) Drainage systems of Lonar Crater, India: Contributions to Lonar Lake hydrology and crater degradation. *Planetary and Space Science*, 95, 45–55.
- Nakamura, A., Yokoyama, Y., Sekine, Y., Goto, K., Komatsu, G., Kumar, S., Matsuzaki, H., Kaneoka, I., Matsui, T. (2014) Formation and geomorphologic history of the Lonar impact crater deduced from in situ cosmogenic  $^{10}\text{Be}$  and  $^{26}\text{Al}$ . *Geochemistry, Geophysics, Geosystems*, 15, 3190–3197.
- Parham, P., Saito, Y., Sapon, N., Suriadi, R., Mohtar, N.A. (2014) Evidence for ca. 7 ka maximum Holocene transgression on the Peninsular Malaysia East coast. *Journal of Quaternary Science*, 29, 414–422.
- Pilarczyk, J.E., Dura, T., Horton, B.P., Engelhart, S.E., Kemp, A.C., Sawai, Y. (2014) Microfossils from coastal environments as indicators of paleo-earthquakes, tsunamis and storms. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 413, 144–157.
- Sato, T., Nakamura, N., Goto, K., Kumagai, Y., Nagahama, H., Minoura, K. (2014) Paleomagnetism reveals the emplacement age of tsunamigenic coral boulders in Ishigaki Island, Japan. *Geology*, 42, 603–606.
- Schneider, J. L., Chague-Goff, C., Bouchez, J. L., Goff, J., Sugawara, D., Goto, K., Jaffe, B., Richmond, B. (2014) Using magnetic fabric to reconstruct the dynamics of tsunami deposition on the Sendai Plain, Japan - the 2011 Tohoku-oki tsunami. *Marine Geology*, 358, 89–106.
- Sugawara, D., Goto, K., Bruce, J.E. (2014) Numerical models of tsunami sediment transport; current understanding and future directions. *Marine Geology*, 352, 295–320.
- Tamura, T. (2014) Aeolian transport of coarse sand over beach ridge in NE Australia: A reply to A Discussion of 'Beach ridges and prograded beach deposits as palaeoenvironment records' *Earth Science Reviews*, 132, 85–87.
- Tanigawa, K., Sawai, Y., Shishikura, M., Namegaya, Y., Matsumoto, D. (2014) Geological evidence for an unusually large tsunami on the Pacific coast of Aomori, northern Japan. *Journal of Quaternary Science*, 29, 200–208.
- Tjallingii, R., Statterger, K., Stocchi, P., Saito, Y., Wetzel, A. (2014) Rapid flooding of the southern Vietnam shelf during the early to mid-Holocene. *Journal of Quaternary Science*, 29, 581–588.
- Yamada, M., Fujino, S., Goto, K. (2014) Deposition of sediments of diverse sizes by the 2011 Tohoku-oki tsunami at Miyako City, Japan. *Marine Geology*, 358, 67–78.
- Zhou, L., Liu, J., Saito, Y., Liu, J.P., Li, G., Liu, Q. (2014) Fluvial system development and subsequent marine transgression in the Yellow River delta, the Bohai Sea and North Yellow Sea regions during the Last Glacial Maximum to the early Holocene. *Continental Shelf Research*, 90, 117–132.

Zhou, L., Liu, J., Saito, Y., Zhang, Z., Chu, H., Hu, G. (2014) Coastal erosion as a major sediment supplier to continental shelves: example from the abandoned Old Huanghe (Yellow River) delta. *Continental Shelf Research*, 82, 43–59.

## **IGCP-589: Development of the Asian Tethyan Realm: Genesis, Process and Outcomes (2012–2016)**

### **Project co-Leaders:**

**Jin Xiaochi (Institute of Geology, Chinese Academy of Geological Sciences),  
Katsumi Ueno (Fukuoka University, Japan),  
Graciano Yumul Jr. (Monte Oro Resources and Energy Inc., Philippines),  
Pol Chaodumrong (Department of Mineral Resources, Thailand)**

**Official website: <http://igcp589.cags.ac.cn/>**

**Japanese regional coordinator: Katsumi Ueno (Fukuoka University)**

**Department of Earth System Science, Fukuoka University, Fukuoka 814-0180 Japan  
Phone: +81-92-871-6631, Fax: +81-91-865-6030, Email: [katsumi@fukuoka-u.ac.jp](mailto:katsumi@fukuoka-u.ac.jp)**

### ***Main object of the project:***

This project is aimed at promoting multi-disciplinary geological investigations in various areas of Asia, to find out more constraints on the interpretation of the development of the Asian Tethyan Realm and to contribute to elucidate the history of the Tethys. In specific, the following topics are focused in this project: regional extension and property of suture zones and other structural lineaments; stratigraphic successions and magmatic series on continental blocks; paleobiogeographic evolution of the Tethyan Realm; timing and process of continental blocks rifting from large cratons; sizes of oceanic basins and the positions of continental blocks at different times; timing and process of the suturing of continental blocks; validity of the one Tethys model, the Paleo-Tethys + Neo-Tethys model, and the Paleo-Tethys + Meso-Tethys + Neo-Tethys model; recent analogues of tectonic environments in the Tethyan Realm; and geological background for hydrocarbon and mineral resource formations.

### ***Meetings held during this year:***

As a regular project meeting, “The Third International Symposium of IGCP-589” was held in Tehran, Islamic Republic of Iran, during 19-26 October 2014. There were some fifty participants from nine countries, including eight from Japan, in this symposium. The symposium was organized by Mr. Mohammad R. Saeidabadi, Dr. Mohammad R. Ghassemi, and Dr. Monireh Poshtkoohi, under the general support of the Geological Survey of Iran. A total of 32 papers were presented in the two-days scientific session, which was held at an auditorium of Amirkabir University of Technology in downtown Tehran. Before and after the session, two field excursions were planned to see the Tethysides in Iran. The pre-symposium excursion was directed to the Alborz Mountains in Northern Iran, where Paleozoic-Mesozoic successions related to the Paleo-Tethys were visited. In the post-symposium excursion, participants mainly examined crystalline basement and sedimentary cover of the Central Iran Block, and ophiolite suite and Devonian to Jurassic rocks of the Sanandaj-Sirjan and Zagros zones in Central Iran.

### ***Activity plan in 2015:***

We are planning to have the fourth international symposium of this project in Thailand. Drs. Thasinee Charoentitirat and Punya Charusiri (Chulalongkorn University, Bangkok) are going to



organize the symposium, which will consist of two-days scientific session, and pre- and post-conference excursions going to East and North Thailand.

***The number of Japanese working group members:***

There are more than 50 members currently listed in the Japanese working group of IGCP-589.

***Selected publications by the Japanese members:***

- Arai, S. and Akizawa, N., 2014. Precipitation and dissolution of chromite by hydrothermal solutions in the Oman ophiolite: new behavior of Cr and chromite. *American Mineralogist*, 99, 28-34.
- Ehiro, M., Nishikawa, O. and Nishikawa, I., 2014. Early Permian (Asselian) ammonoids from the Taishaku Limestone, Akiyoshi Belt, Southwest Japan. *Paleontological Research*, 18, 51-63.
- Isozaki, Y., 2014. Memories of pre-Jurassic lost oceans: how to retrieve them from extant lands. *Geoscience Canada*, 41, 283-311.
- Kamata, Y., Kato, M., Ueno, K., Miyahigashi, A., Charoentitirat, T. and Sardud, A., 2015. Middle-Late Devonian radiolarians from Klaeng District, Rayong Province, southeastern Thailand: Geotectonic significance of the Rayong area as a continental margin of the Sibumasu Block. *Journal of Asian Earth Sciences* (in press).
- Kamata, Y., Shirouzu, A., Ueno, K., Sardud, A., Charoentitirat, T., Charusiri, P., Koike, T. and Hisada, K., 2014. Late Permian and Early to Middle Triassic radiolarians from the Hat Yai area, southern peninsular Thailand: Implications for the tectonic setting of the eastern margin of the Sibumasu Continental Block and closure timing of the Paleo-Tethys. *Marine Micropaleontology*, 110, 8-24.
- Khedr, M.Z., Arai, S., Tamura, A. and Python, M., 2014. Chemical variations of abyssal peridotites in the central Oman ophiolite: evidence of oceanic mantle heterogeneity. *Gondwana Research*, 25, 1242-1262.
- Knittel, U., Suzuki, S., Nishizaka, N., Kimura, K., Tsai, W.-L., Lu, H.-Y., Ishikawa, Y., Ohno, Y., Yanagida, M. and Lee, Y.-H., 2014. Single grain U-Pb dating of detrital zircons from the Sanbagawa Belt in western Shikoku: additional evidence for the prevalence of Late Cretaceous protoliths of the Sanbagawa Metamorphics. *Journal of Asian Earth Sciences*, 96, 148-161.
- Kojima, S., Nozaki, T., Nagata, H., Tanahashi, R., Kondo, R., Okamura, N., Suzuki, K., Ikeda, A., Nakamura, T. and Ohtani, T., 2014. Large-scale landslides in Toyama Prefecture, central Japan, and their probable relationship with earthquakes. *Environmental Earth Sciences*, 71, 2753-2763.
- Komatsu, T., Kato, S., Hirata, K., Takashima, R., Ogata, Y., Oba, M., Naruse, H., Ta, H. P., Nguyen, D. P., Dang, T. H., Doan, N. T., Nguyen, H. H., Sakata, S., Kaiho, K. and Konigshof, P., 2014. Devonian-Carboniferous transition a Hangenberg Black Shale equivalent in the Pho Han Formation on Cat Ba Island, northeastern Vietnam. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 404, 30-43.
- Safonova, I., Kojima, S., Nakae, S., Romer, R.L., Seltmann, R., Sano, H. and Onoue, T., 2015. Oceanic island basalts in accretionary complexes of SW Japan: Tectonic and petrogenetic implications. *Journal of Asian Earth Sciences* (in press).
- Shigeta, Y., Komatsu, T., Maekawa, T. and Dang, T. H., 2014. Olenekian (Early Triassic) stratigraphy and fossil assemblages in northeastern Vietnam. *National Museum of Nature and Science Monographs*, 45, 1-309.
- Ueno, K., Arita, M., Meno, S., Sardud, A. and Saesaengseerung, D., 2015. An Early Permian fusuline fauna from southernmost Peninsular Thailand: Discovery of Early Permian warming spikes in the peri-Gondwanan Sibumasu Block. *Journal of Asian Earth Sciences* (in press)

## **IGCP-608: Asia-Pacific Cretaceous Ecosystems (2013–2017)**

### **Project co-Leaders:**

**Hisao Ando (Department of Earth Science, Faculty of Science, Ibaraki University, Japan)**

**Xiaoqiao Wan (School of Geosciences and Resources, China University of Geosciences, China)**

**Daekyo Cheong (Department of Geology, College of Natural Sciences, Kangwon National University, Korea)**

**Sunil Bajpai (Birbal Sahni Institute of Palaeobotany, Lucknow, India)**

### **National Working Group Leader (called as Regional Coordinator in IGCP608):**

**Prof. Takashi Hasegawa, Dept. Earth Sciences, Graduate School of Natural Sciences and Technology, Kanazawa University, Kanazawa, 920-1192, Japan**

**Phone: +81-76-264-6508; Fax: +81-76-264-6545,**

**e-mail: [jh7ujr@kenroku.kanazawa-u.ac.jp](mailto:jh7ujr@kenroku.kanazawa-u.ac.jp)**

### ***Main object of the project:***

The Cretaceous “greenhouse” period is known for elevated atmospheric CO<sub>2</sub> levels and much higher global sea levels than today. The Cretaceous period is thus an ideal study-object for the unraveling and understanding the development of ecosystems due to modern and future climatic changes. A great variety of well-preserved environments and ecosystems of the past can be found in the Cretaceous geological records of Asia and the Western Pacific rim. From these we can obtain abundant significant information.

This projects’ aim is to delineate such Cretaceous ecosystems and how they responded to the paleo-environmental changes that affected the South-East Asian and adjacent Western Pacific region. This will be based on the multitude of the adequate information gathered from terrestrial and marine strata. We will depict how the types of ecosystems that were established during the Cretaceous evolved in Asia and the Western Pacific. Doing so, we will try to ascertain links between global and local environmental changes in both marine and terrestrial ecosystems. This project comprises two groups of major topics: 1) Variations of Cretaceous terrestrial and marine environments in Asia and the Western Pacific; 2) Evolution of Cretaceous terrestrial and marine ecosystems in Asia and the Western Pacific

The project has an important role in promoting communication at the level of geoscience among the various Asian countries, including some countries outside Asia. The results of this project will increase and enhance our knowledge and understanding of present and future climatic changes using past global warming and the effects on the ecosystem as an example.

### ***Meetings held during this year or Japanese participation in the project meeting:***

1) Second International Symposium of IGCP608 “Land-Ocean Linkages and Biotic Evolution during the Cretaceous: Contribution from Asia and Western Pacific”, September 4-6, Waseda University, Tokyo, Japan. A total of 53 Japanese members among 92 registered participants from 13 countries participated, including 9 women and 16 PhD/master course students.

Post-symposium field excursion “Cretaceous forearc basin siliciclastic successions along the Pacific coast, central Japan: Choshi, Nakaminato and Futaba groups”, September 7-10, Tokyo - Choshi - Tsukuba - Nakaminato - Kitaibaraki - Iwaki - Tokyo, Japan: a total of 18 Japanese participants including three guides.

As a newsflash, some photos showing the outline of the meeting and excursion were uploaded on IGCP608 website as follows:

<http://igcp608.sci.ibaraki.ac.jp/index.php?id=5>

<http://igcp608.sci.ibaraki.ac.jp/index.php?id=12#a608W>

The meeting report was submitted to the Newsletter of Geological Society of Japan (Vol. 17, No. 10, p. 7-9) in Japanese.

2) 4th International Palaeontological Congress in Mendoza, Argentina (Sept. 28 to Oct. 3) and a session as an opening symposium (2014) of IGCP632 “Continental Crises of the Jurassic: Major Extinction Events and Environmental Changes within Lacustrine Ecosystems”. Dr. T. Sakai joined this meeting as a member of IGCP608.

3) 9th International Symposium “Cephalopods - Present and Past” (ISCPP9) in combination with the “International Coleoid Symposium” Universität Zürich, September 04-14, 2014 in Zürich, Switzerland. Two Japanese members (Y. Iba and R. Wani) of IGCP608 and a few Japanese scientists attended and presented their talks.

4) International Symposium on Asian Dinosaurs in Fukui, March, 21-23, 2014, Fukui Prefectural University and Fukui Prefectural Dinosaur Museum, Fukui, Japan. Over ten IGCP608 members among 35 Japanese scientists at least attended this meeting including Y. Azuma, R. Hirayama, S. Sano, etc.

5) Symposium on “Earth History of Asia-II (EHA-II)”, October 31-November 1, Niigata University, Japan: About ten members including A. Matsuoka, a chairman of the organizing committee of this meeting, his several students, H. Ando, Y. Iba and his student.

#### ***Achievements in 2014:***

1) Website and mailing list communications of IGCP608

We have operated the project website under the following address (<http://igcp608.sci.ibaraki.ac.jp/>) as a platform to announce and share the information of our project activities in 2014, including download site of abstracts and field guides, publication lists of members since 2013, meeting photos and other related meeting information. By using mailing list, the leader, H. Ando circulated some kinds of information on meeting, website update and other announcements.

2) Scientific activities and publications by Japanese members

Japanese Cretaceous researchers mostly by IGCP608 members were very active during 2014 as in 2013 and published many publications as the list below. Several members of Japan contributed in several ways to Geopark activities and museum exhibits of dinosaurs and Cretaceous fossils. Their activities were briefly introduced in the Geoparks session of the second meeting in Tokyo.

3) 2nd International Symposium and post-Symposium Excursion of IGCP608

By making the organizing committee, we successfully and fruitfully held the Second International Symposium and post-Symposium excursion. Many Japanese Cretaceous scientists have concerned with this meeting in several ways. Our Second International Symposium and Excursion in Tokyo itself overviewed the current state of the Cretaceous geological sciences in Japan, in addition to promoting scientific exchange and communications between scientists from different countries and institutions

and facilitating learning opportunities. Several young scientist as PhD/master course students joined and presented their researches in oral and poster sessions. We understood the further and comprehensive studies through integrated approach are necessary for the better understandings of the Cretaceous paleoenvironments and the paleoecosystems in Asia.

#### 4) Joint international researches of Japanese members

Several joint reaches such as Japan-China, Japan-Philippines, Japan-Malaysia, Japan-Mongolia and Japan-Canada teams were actively carried out in each the certain/specific field of the Cretaceous sediments. Especially, Japan-Mongolia research project organized by Hisao Ando (Ibaraki Univ.) had success in drilling about 240 meter cores of Cretaceous lacustrine beds in Southeast Gobi Basin for reconstructing a terrestrial environmental changes during mid-Cretaceous, following 150 m cores in 2013.

#### 5) Educational, training or capacity-building activities

##### (1) Dual Degree Program between Niigata University, Japan and China University of Geosciences (Beijing, Wuhan)

Three Japanese and two Chinese PhD students have studied the Cretaceous strata in China: e.g. Mr. Yoshino has been working on palynology of SK-1 core in Songliao Basin.

##### (2) Oral and poster sessions mainly for students in international symposium

In the Symposium on “Earth History of Asia-II” ( 7) of 3.2), a half day oral and two day poster sessions were organized mainly for graduate and bachelor students. Three of 12 oral and 9 of 31 posters were presented by Chinese and Japanese students, concerning with Cretaceous articles related to IGCP608.

##### (3) 7th China-Japan-Korea Graduate Student Forum - Environment, Resources and Life

The “7th China-Japan-Korea Graduate Student Forum - Environment, Resources and Life” were held on September 26-28, 2014, China University of Geosciences, Beijing, China. Wan, X. (co-leader) and Chinese IGCP members helped this meeting as committee members. Especially, Wan provided a keynote talk on the Cretaceous lake deposits of Songliao Basin in NE China concerned with Cretaceous paleoecosystem and paleoenvironments. This meeting itself covers agriculture, environmental and life sciences in scope. Among about 160 attending students from 13 universities of three countries, some (five or more) students from Japan and China presented their researches on Cretaceous geosciences related to IGCP608.

##### (4) Geoparks activities

Many IGCP608 members of universities, museums and research institutes have much involved in the following Japanese National Geoparks activities by providing scientific information on Cretaceous geosites in lectures, article writings and geo-tour guidance.

Hakusan-Tedorigawa Geopark

Dinosaur Valley Fukui Katsuyama Geopark

Choshi Geopark (visited in field excursion of 2nd Meeting)

Mikasa Geopark

Amakusa (former Amakusa-Goshoura) Geopark

North Ibaraki Geopark (visited in field excursion of 2nd Meeting)

Sanriku Geopark

These national geoparks have been certificated by Japanese Geopark Network (<http://www.geopark.jp/en/index.html>) for the last a few years.

Some of their geologic aspects were introduced and discussed in the Cretaceous geopark session of our second meeting. H. Takagi, a Japanese Geopark Committee member briefly introduced the ongoing trend of IGGP in UNESCO as well as the general review of Japanese Geopark Network activities a few years in the oral session.

(5) Editorial supports on weekly Japanese magazine “The 4.6 billion Journey of Earth”

The weekly Japanese magazine “The 4.6 billion Journey of Earth” (a total of 50 issues) has been recently published by a Japanese publisher, Asahi Shimbun Publications, with the leader’s (H. Ando) help as a supervising editor. As the 25th to 32nd issues out of 50 deal with the Cretaceous period, several members (geologists and paleontologists) have contributed to the editorial works as supervisors depending on their own special themes under Ando’s guidance. Through these works we have much contributed to public awareness on earth sciences such as earth environments and their history and formation processes.

***Activities planned in 2014 or later:***

International Meeting

- 1) Third International Symposium jointly with 12th Symposium on Mesozoic Terrestrial Ecosystems (MTE), August 16-18, 2015, Shenyang Normal University, Shenyang, China  
Filed excursion will go around Zhaoyang and Benxi area, Liaoning during 19-20 August.  
Hosted by Prof. Sun Ge and Chinese IGCP608 leaders and members.
- 2) Third IGCP609 (Cretaceous Sea-Level) Workshop 2015, Nanjing, China organized by Xiumian Hu and his colleagues, September 6–7 plus 4 days (September 8-11) field trip to Jiangsu province, NE. China
- 3) Second Symposium of IGCP632 (Continental Crisis of the Jurassic), September 12-13, 2015, Northeastern University, Shengyang, China and 6-days (September 14-19) field excursion
- 4) International Symposium on Asian Dinosaurs in Thailand, 2015

International joint researches

In each joint research team we will carry the field surveys and compile their results step by step.

***The number of Japanese working group members:***

A total of 76 (23 student and young scientists) members currently listed in the Japanese working group of IGCP-608.

***Publications:***

- Danilov, I., Hirayama, R., Suchanov, V., Suzuki, S., Watabe, M. and Vitek, N., 2014, Cretaceous soft-shelled turtles (Trionychidae) of Mongolia: new data and a revision. *Journal of Systematic Paleontology*. **12**, 799-832.
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