

**Report of the 2nd International Symposium on Earth History of Asia,  
31 October – 3 November, 2014, Niigata, Japan**

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**Abstract**

The 2nd International Symposium on Earth History of Asia was organized at Niigata, Japan, from 31 October to 3 November, 2014. The scientific session was held in Niigata University (Ikarashi Campus) on 31 October and 1 November, where a total of 126 scientists including 27 oversea ones from China, Korea, Taiwan, and India participated. The scientific session included 5 keynote talks, 9 invited talks, 13 oral presentations and 31 poster presentations. The program and abstracts of the scientific session was published in a supplement volume of Science Reports of Niigata University (Geology). The symposium also included a two-day field excursion in the Itoigawa Global Geopark. Activities of the excursion were, visits to three geosites, a tour of the Itoigawa City Museum of History and Folklore and a panel discussion at the Itoigawa City Hall. Sixty-one participants including earth scientists and local geopark mentors and tour guides joined the panel discussion. This symposium was conducted as part of the Niigata University Good Practice (GP) Program entitled “Formation of research and education hub for field geology in Asia-Oceania region” by the Faculty of Science from 2012 to 2014 fiscal years.

*Key words:* Earth History of Asia, partner institutions, Double Degree Program, Itoigawa Global Geopark, Niigata University Good Practice Program.

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## Introduction

The 1st International Symposium on Earth History of Asia was held in October, 2009 at Niigata University, Japan. The symposium was a milestone for initiating collaboration in research and education between Niigata University and partner institutions. Since then, collaborative research and student exchange have been increasing continuously. As part of the Global Circus Program performed by the Graduate School of Science and Technology, a special educational program termed “Double Degree Program” (DDP) was started in 2009, through which the participating students can matriculate at both Niigata University and the partner institutions. They are eligible to obtain “the double-degree”, receiving a separate degree from each university or institution. To date, three graduate students in the field of earth sciences from Niigata University have been sent to partner institutions in China and one student has been received from Taiwan.

The 2nd International Symposium on Earth History of Asia was held at Niigata University in Niigata, Japan, from 31 October to 3 November, 2014. The symposium aimed at having an opportunity to exchange idea for understanding the evolutionary history of geo-sphere and bio-sphere of the earth, especially in the Asian regions. Another objective of this symposium was to enhance partnerships among cooperative organizations, especially DDP partners. Participating institutions were China University of Geosciences (Beijing), China University of Geosciences (Wuhan), Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences, National Cheng Kung University (Taiwan), Pukyong National University (Korea), and Indian Institute of Science. During the symposium, we visited the Itoigawa Global Geopark and had an outreach session on geopark activities. Participating graduate students from each institution had an occasion to present their research achievements either in oral or poster presentation session and to participate in further discussion sessions and various exchange opportunities with undergraduate and graduate students from Niigata University and other international partner institutions. We believe that this was a great chance to foster and expand international academic networks among faculty members and students in order to make advancements in research and education.

This symposium is one of activities in the Niigata University Good Practice (GP) Program entitled “Formation of research and education hub for field geology in Asia-Oceania region” which has been performed by the Faculty of Science from 2012 to 2014 fiscal years. Undergraduate students of the Faculty of Science who participated in the entire activities of the symposium obtained a credit of “Overseas training course”. This report summarizes the organization of the symposium, the scientific session in Niigata University and the excursion in the Itoigawa Global Geopark.

### Organization of the symposium

The symposium was planned and performed by the following committees.

#### *Organizing Committee:*

Prof. Atsushi MATSUOKA, Niigata University (Chairperson)

Prof. Eiichi TAKAZAWA, Niigata University

Prof. M. SATISH-KUMAR, Niigata University

Associate Prof. Toshiyuki KURIHARA, Niigata University

#### *Program Committee:*

Prof. M. SATISH-KUMAR, Niigata University

Prof. Xiaoqiao WAN, China University of Geosciences, Beijing

Prof. Qinglai FENG, China University of Geosciences, Wuhan

Prof. Yongdong WANG, Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences

Prof. Huai-Jen YANG, National Cheng Kung University

Prof. Tae-Seob KANG, Pukyong National University

#### *Advisory Committee:*

Prof. Hisaaki KUDO, Niigata University

Prof. Shouting ZHANG, China University of Geosciences, Beijing

Prof. Changqian MA, China University of Geosciences, Wuhan

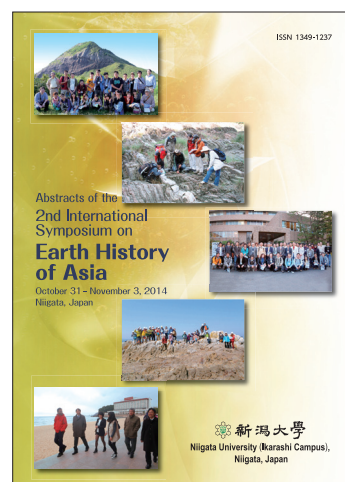
Prof. Qun YANG, Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences

Prof. Gwo Giun LEE, National Cheng Kung University

Prof. Heon-Tae KIM, Pukyong National University

Supporting organizations for the international symposium were the Graduate School of Science and Technology, Niigata University; Faculty of Science, Niigata University; Research Centre for Earth and Environmental Sciences, Niigata University; Research Center of Science on Form, Niigata University; Itoigawa Geopark Council; Japanese Geoparks Network.

**Fig. 1.** Cover page of Abstracts of the 2nd International Symposium on Earth History of Asia.



### Scientific session in Niigata University

The scientific session of Earth History of Asia was held on 31 October at the University Library Hall and on 1 November at a lecture room of the Graduate School of Science and Technology, Niigata University (Ikarashi Campus). The session was composed of oral and poster presentations. Posters were displayed during these two days. A total of 126 participants, including 27 from overseas partner institutions joined the session. The program and abstracts of the scientific session are presented in a supplement volume of Science Reports of Niigata University (Geology) (Organizing Committee of EHA-II, 2014). The cover page is shown in Fig. 1.

On 31 October, the session started with a welcome speech by Prof. Hisaaki KUDO, Dean of the Graduate School of Science and Technology, Niigata University, followed by an opening address by Prof. Atsushi MATSUOKA, Vice Dean of the Graduate School of Science and Technology, Niigata University. A group photo was taken at the University Library Hall after the opening session (Fig. 2). Five keynote lectures were presented by Prof. Xiaoqiao WAN (China University of Geosciences, Beijing), Prof. Yongdong WANG (Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences), Prof. Tae-Seob KANG (Pukyong National University), Prof. Yueh Jen LAI (National Cheng Kung University), and Prof. Hiroshi FUKUOKA (Niigata University). A Conference Banquet was



**Fig. 2.** Group photograph of the participants in the scientific session of the 2nd International Symposium on Earth History of Asia held at the University Library Hall, Niigata University (Ikarashi campus).

held at Hotel Nikko Niigata. The banquet started with a welcome address by Prof. Takuji OHYAMA, Dean of Institute of Natural Science and Technology, Niigata University, and the participants enjoyed traditional Japanese delicacies.

On 1 November, nine invited talks and 13 oral presentations were performed in the morning and afternoon sessions, respectively. The invited talks were presented by delegates from Indian Institute of Science (Bengaluru), China University of Geosciences (Beijing), Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences, National Cheng Kung University (Taiwan), Ibaraki University, Hokkaido University, University of Toyama and Niigata University. A total of 31 posters were presented in the entrance hall of the Graduate School of Science and Technology. A lunch-on meeting of faculty members was organized and various issues on research, education and future collaboration were discussed. After the full-day symposium, a Conference Reception was held at Niigata University Cafeteria. Winners of excellent oral and poster presentation prizes were announced during the reception (Fig. 3). The excellent oral prize was awarded to Liqin LI of Nanjing Institute of Geology and Palaeontology for her talk entitled “Late Triassic palaeoclimate and palaeoecosystem variations inferred by palynological record in the northeastern Sichuan Basin, China”. The excellent poster prize was awarded to Aya KUBOTA of Hokkaido University for her poster entitled “Micro-organisms in amber from the Aptian (Cretaceous) of Yezo Group, northern Japan”.



**Fig. 3.** Winners of excellent oral and poster presentation prizes, Liqin LI (A) and Aya KUBOTA (B).

### Excursion in Itoigawa Global Geopark

After the scientific session held in Niigata University, a two-day field excursion in the Itoigawa Global Geopark was organized. Activities of the excursion included visits to three geosites in the Itoigawa Global Geopark, a tour of the Itoigawa City Museum of History and Folklore and a panel discussion at the Itoigawa City Hall.

A tour bus started from Niigata City in the morning of 2 November, heading to Itoigawa. After 2 and half hours of drive, 34 participants arrived at the Kotakigawa Jade Gorge Geosite (Fig. 4A). They examined the complex geology composed of Paleozoic–Mesozoic rocks and enjoyed traditional local lunch (Fig. 4B) prepared by Kotaki residents. In the afternoon, the participants continued field observations along the Kotakigawa River. After the first day's excursion, the participants stayed at two different places; the faculty members stayed at Hotel White Cliff and the student participants at the Seminar House of Omi Junior High School.

In the morning of 3 November, the two groups joined at the Fossa Magna Park in the Itoigawa–Shizuoka Tectonic Line and Salt Trail (North) Geosite and walked around the park (Fig. 4C). The highlight of the geosite was to examine an outcrop of the Itoigawa–Shizuoka Tectonic Line. The next site was the Omi Coast Geosite where the participants tried to collect jade pebbles. No one was successful in finding a jade, but all could enjoy big waves of the sea (Fig. 4D). After the outdoor activities, they moved to the city center and visited the Itoigawa City Museum of History and Folklore.

In the afternoon, an outreach session composed of lectures and a panel discussion was held at the Itoigawa City Hall. Sixty-one participants including earth scientists and local geopark mentors and guides joined the event (Fig. 4E). The session started with an opening address by Dr. Ko TAKENOUCI of the Fossa Magna Museum in Itoigawa City and was followed by a welcome speech by Mr. Toru YONEDA, Mayor of Itoigawa City. Two lectures introduced geoparks: Charms of Itoigawa Global Geopark by Mr. Theodore BROWN, Itoigawa Geopark Council; Charms of Tateyama–Kurobe Geopark by Dr. Utako UCHIKOSHIYAMA, Uozu Buried Forest Museum in Uozu City, Toyama Prefecture. The aims of the panel discussion were to establish partnership between local communities and earth scientists from neighboring Asian countries and to exchange idea for improving outreach activities through direct communications between them. The panel discussion was facilitated by Prof. Atsushi MATSUOKA (Niigata University) with a contribution of Mr. Theodore BROWN, Dr. Utako UCHIKOSHIYAMA, Prof. Tae-Seob KANG (Pukyong National University), Prof. Huai-Jen YANG (National Cheng Kung University), Prof. Yongdong WANG (Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences), Prof. Xiaoqiao WAN (China University of Geosciences, Beijing), and Dr. Tsuyoshi ITO (China



**Fig. 4.** Field excursion and panel discussion in the Itoigawa Global Geopark. A. Group photograph at the Kotakigawa Jade Gorge Geosite, B. Traditional lunch prepared by Kotaki residents, C. Field observation at the Fossa Magna Park (Itoigawa-Shizuoka Tectonic Line), D. Jade collection at the Omi Coast Geosite, E. Group photograph of the participants in the outreach session and panel discussion at the Itoigawa City Hall.

University of Geosciences, Wuhan). A closing address was given by Mr. Haruhisa TAMURA, Director of the Fossa Magna Museum. Mr. Theodore BROWN acted as an interpreter throughout the session.

The Itoigawa excursion was planned and guided by Yousuke IBARAKI, Ko TAKENOUCHI (Fossa Magna Museum, Itoigawa), Tsuyoshi ITO (China University of Geosciences, Wuhan), Toshiro TAKAHASHI and Atsushi MATSUOKA (Niigata University).

### **Acknowledgements**

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### **References**

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