## **Anniversaries**

## 100 years Geological Society of China



## GEOLOGICAL SOCIETY OF CHINA: FOUNDATION AND DEVELOPMENT

Jiuchen Zhang (CHINA), Jingfei Zhang (CHINA), Gengshen Zhan (CHINA)

In 1922, the Geological Society of China was founded and at the beginning of its establishment, Chinese scholars hoped to create an academic organization like the Geological Society of London. However, the development of geology in China had already made great progress compared with the period when the Geological Society of London was established. In the early 1920s China already had specialized geological education and research institutions and a number of professional geologists. Chinese scholars believed that geological institutions within the government system "have to focus on regular work" and cannot "provide an opportunity for full and free discussion" for academic research. As these institutions promoted the development of applied geological services, such as geological surveys, it was difficult to advance academic research in China. To some extent, the Society filled the void for this deficiency of the academic institutions.

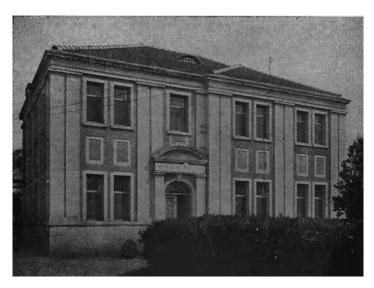


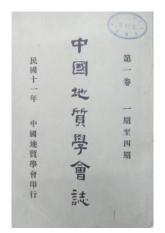
Fig. 1-The building of the Geological Survey of China, Beijing.

On January 27, 1922, in the newly built library of the Geological Survey of China (Fig. 1) in Bingmasi Hutong, Beijing, 26 Chinese and foreign geologists working in China attended the inaugural meeting of the Society and discussed the constitution of the Society. The membership of the Society was not limited by nationality. In the early days of its establishment, the members of the Society included not only Chinese geologists, but also scholars (Some of them were working in China) from the United States, Russia, France, Britain, Sweden, Japan, Bel-

gium, the Czech Republic and Austria. The establishment of the Geological Society of China attracted the attention of the international scientific community (Gregory, 1923, p. 883; Anonymous, 1922, p. 258). The Geological Society of China also allowed relevant institutions to join the Society in the form of organs or groups. This inclusiveness of the Society soon made it an academic exchange centre within the Chinese geological community.

The annual meeting of the Society provided an opportunity for geologists to get together. In addition to the routine annual report, academic papers could be read out and special discussions could be held during the meeting. After the meeting, geological field trips and geological exhibitions were often organized. The early conference language was English, so the academic conference of the Society was not only the exchange of scientific research between domestic scholars, but also provided a forum for exchange between Chinese scholars and scholars worldwide. Many new theories were put forward and discussed within these academic conferences.

The Bulletin of the Geological Society of China (renamed Acta Geologica Sinica from 1952) was the core academic journal of the Chinese geological community (Fig. 2). In addition to exchanging publications with more than 20 institutions in China, the Society also exchanged publications with more than 160 institutions from more than 40 countries and regions around the world. As most of the papers in the Bulletin of the Geological Society of China were in English, French and German prior to 1949, the scientific journal gradually made an international impact. In 1936, the Geological Society of China published a Chinese Journal, Geological Review. In addition to special reports and academic papers, this journal also published abstracts, reviews and news from the geological community, thus becoming an important window for information exchange within China's geological community. Nowadays, 100 years after the founding of the Geological Society of China, more and more academic journals are published, such as Geology and Exploration (founded in 1957), Acta Sedimentologica Sinica (founded in 1983), Journal of Groundwater Science and Engineering (founded in 2013), etc.



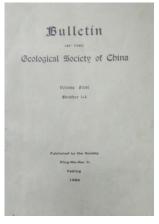


Fig. 2- Covers (in Chinese and in English) of the first volume of Bulletin of the Geological Society of China

In 1937, the emblem of the Geological Society of China (Fig. 3) was announced at its 13th annual meeting in Beijing. One of the journals of the same year, *Geological Review*, specially published an article to introduce the meaning of the emblem: in the middle of the pattern is the Chinese character "Zhong ( $\dagger$ )", and the four characters placed around this are respectively "soil ( $\pm$ )", "stone ( $\Xi$ )", "mountain ( $\dot{\bot}$ )" and "water ( $\dot{\bot}$ )". Soil and stone represent geological objects, while mountain and water represent geological processes such as transgression, regression and orogeny. The word "Zhong" surrounded by the four words represents China and the Geological Society of China. If the emblem is regarded as a map, it represents the epitome of China: The East is the ocean and multi lake area, represented by "water ( $\dot{\bot}$ )"; the west is mountain area with high terrain, represented by "mountain ( $\dot{\bot}$ )"; in the south, "stone ( $\Xi$ )" represents

the hilly area; the "soil ( $\pm$ )" in the North represents loess and other soil-like deposits. If you read from the top, bottom, left and right, "stone in soil ( $\pm$ 中石)", "soil in stone ( $\Xi$ 中 $\pm$ )", "mountain in water ( $\pm$ 中山)" and "water in mountain ( $\pm$ 中本)" reflect the basic philosophy in geological research. The Chinese name (中国地质学会) and the English name of the Society are on the top and at the bottom of the emblem respectively.

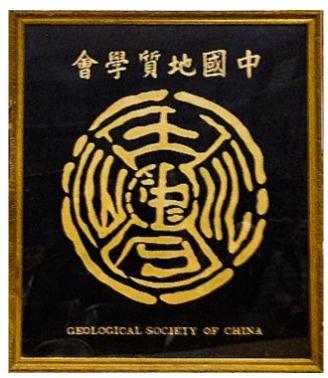


Fig. 3- The emblem of the Geological Society of China preserved at Taiwan University (Photo: Gengshen Zhan)

The Geological Society of China promoted the theoretical research of geology by setting up medals and grants. The Society awarded in total five medals and grants prior to 1949: the Grabau Medal (Fig. 4) from 1925 to 1948, the research grant of Mr. Zhao Yazeng from 1930 to 1949, the commemorative prize of Mr. Ding Wenjiang from 1936 to 1948, a student scholarship from 1940 to 1948 and the commemorative awards of Mr. Xu Deyou, Mr. Chen Kang and Ms. Ma Yisi from 1944 to 1949.

The Grabau Medal was the highest award of the Society prior to 1949. In order to make up for the lack of paleontological research, in 1920, Amadeus William Grabau (1870-1946), a famous American paleontologist, was invited to the Department of Geology of Peking University to engage in paleontology and stratigraphic research. Almost all of China's early paleontologists were Grabau's students (Yang, 1992, p. 5). By 1948, the Grabau Medal had been awarded nine times, and the holders were famous Chinese and foreign geologists working in China. Since the 1980s, the Society has established several awards such as the Li Siguang Geological Science Award and the Huang Jiqing Youth Award for Geological Science and Technology.

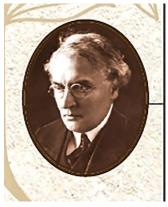






Fig. 4 - Grabau Medal (Photo: Gengshen Zhan)

Most awards in geology are named after famous geologists, among which the Ma Yisi Award can be distinguished as it is the only award in geology in China set up in honor of a female geologist in the early 20th century. In the first half of the 20th century, there were few female geologists in China, and these were more engaged in teaching within geological departments of universities rather than in geological fieldwork. Ma Yisi (1919-1944) was the only female geologist to have carried out fieldwork. She was admitted to the largest geological survey institution in China and became the first woman in the institution with excellent scores for being fluent in the Chinese, English, German, French, Russian and Japanese languages and held first place in 28 examinations during her study. Unfortunately, she was killed by bandits on her first field trip at the age of 25.

The status of women rose significantly in the 1950s with the promotion of the slogan "Women Hold Up Half the Sky."(Fig. 5) The number of female geologists began to increase, and they became active in the discipline of Geology in China. In 2017, the Geological Society of China established "The Female Geologist Prize", which was awarded for the first time in 2018. The prize is awarded every two years, with no more than ten winners at a time.



Fig. 5-A poster from the 1950s (Chinese characters in the poster: Women Hold Up Half the Sky)

As a national academic organization, the Geological Society of China has played an important role in formulating policies and research directions, standardizing investigation and prediction procedures, determining terms and sorting out data, popularizing modern geoscience knowledge and promoting academic exchanges. It has become a common platform for geologists to conduct academic exchanges. Especially in the era when China lacked a unified geological research management mechanism and the Geological Survey of China was unable to play its academic management function, the role of the Geological Society of China in the coordination and exchange of academic research was irreplaceable.

## **Further Reading**

Anonymous. (1922). *The Geological Society of China*. Science, Vol 55 (Mar. 1922), Issue 1419, p. 258.

Gregory, J. (1923). The Geological Society of China. Nature, 112 (Dec. 1923), p. 883.

Ting, V. K. (1922). The Aims of the Geological Society of China, "Bull. Geol. Soc. China", 1, No. 1-4, p.8.

Wang, E., ed. (2002). 80th anniversary of the Geological Society of China. Chronicle of Events, Geological Publishing House, Beijing. (In Chinese)

Xia, X. R. & Wang, G. Y. (1982). *The history of the Geological Society of China*, Geological Publishing House, Beijing. (In Chinese)

Xu, S. S., ed. (2002). 80th anniversary of the Geological Society of China. Commemorative Papers, Geological Publishing House, Beijing. (In Chinese)

Yang, C. H. (1992). *Records of Mr. Ruan Weizhou's visit*, Taipei: Institute of Modern History, Academia Sinica, p. 5. (In Chinese)

Yang, Z. J. (1983). *Memoirs of Yang Zhongjian*, Geological Publishing House, Beijing. (In Chinese)

Zhang, H. Z. (1937). A brief history of geological development in China, Commercial Press, Changsha. (In Chinese)

\_\_\_\_\_

Publication online: Posted IUGS Website / INHIGEO Website Anniversaries

March 2022

IUGS E-Bulletin Issue 184, March 2022.

Author: Prof Jiuchen Zhang

Member of INHIGEO (CHINA):

The Institute for the History of Natural Sciences, Chinese Academy of Sciences, Beijing, China.

Email: zjc@ihns.ac.cn

Jingfei Zhang

Ph.D. candidate from The Institute for the History of Natural Sciences,

Chinese Academy of Sciences, Beijing, China.

Email: zhangjingfei1218@qq.com

Prof Gengshen Zhan

Geological Survey and Geological Society of Jiangsu Province,

Room 711, Geological Building, 700 Zhujiang Road, Nanjing, China.

Email: gszhan700@163.com

The full list of contributions to the INHIGEO Anniversary Series is available on the website: http://www.inhigeo.com/anniversaries.html