

Call for participation in

International Symposium on Triassic Integrated Stratigraphy and Bio-Environmental Events joint with the 5th International Conference of Geobiology

10-13 June, 2020, Wuhan, China

Conveners: Zhong-Qiang Chen, Wolfram Kürschner & Yadong Sun

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Dear Colleagues,

The Subcommission on Triassic Stratigraphy (STS) is organizing the "International Symposium on Triassic Integrated Stratigraphy & Bio-Environmental Events", jointing with the 5th International Conference of Geobiology on 10-13 June, 2020, in Wuhan, China. To promote studies on global Triassic stratigraphy and better understand on biotic & environmental evolutions during the Paleozoic-Mesozoic transition, we invite Triassic experts in the world to join the Triassic symposium.

The symposium addresses the following five aspects:

- 1) Triassic integrated stratigraphy and GSSPs;
- 2) Triassic mass extinctions (P-T & T-J) and recovery;
- 3) Minor extinctions and lesser calamities (i.e., SSB, mid-Carnian events, etc.);
- 4) Triassic paleontology and macroevolution;
- 5) Triassic biosedimentology and paleobiogeography.

Year 2020 is the first year for the new STS executive, thus, we will summarize our achievements in past 4 years and, more importantly, promote new collaboration, and discuss future works on Triassic stratigraphy and bio-environmental events.

The Symposium (Theme 5 in 5th IGC Circular) offers pre-Symposium and post-Symposium field excursions to Fengshan, South China and Xi'an, NW China, offering opportunities to exam the uppermost Permian to Middle Triassic marine and terrestrial sections. The programs also include sightseeing on amazing Karst landscapes in South China and ancient Chinese culture in the Xi'an city.

You are cordially invited to participate in the Triassic Symposium as well as these two field excursions. The 2nd Circular of the 5th IGC including more details on this symposium is also attached. Please kindly contact the conference secretary Dr. Jun HU (Tel: 086-15527725502; Email: <u>hujuncug@163.com</u>) for details about registration and accommodation. If you are interested in either field excursion, please contact field excursion leaders directly for registration and itinerary (see below).

We are looking forward to seeing you in Wuhan in this June.

Best wishes,

Yadong Sun

on behalf of Zhong-Qiang Chen, Wolfram Kürschner

Brief Introductions on Pre- & Post-Symposium Field Excursion:

Pre-Symposium field excursion to Fengshan area, Guangxi (4 days; June 7-10, 2020): Examining the Uppermost Permian to Middle Triassic successions on shallow platform settings, with emphasis on P-Tr, I-O and O-A boundaries, carbonate factory changes across the PTB, and microbialites. Sightseeing include the classic karst landscape of the Leye-Fengshan Karst Geopark. A detailed field guide is available for all excursion participants.

Leaders: Haishui Jiang, Yan Chen (CUG) (jiangliuis@163.com)

Field Excursion Schedule:

- June 7: Morning, assembling somewhere in Nanning City, the capital of Guangxi Province; Afternoon: moving to Fengshan county town, staying overnight at Fengshan county town.
- June 8: Visiting the uppermost Permian to Middle Triassic successions at the Waili-Laren sections. Morning: examining the PTB succession and microbialites at the Waili section; Afternoon: investigating the Lower-Middle Triassic successions at the Laren section and adjacent area. Staying overnight at the

Fengshan county town.

- June 9: Visiting the uppermost Permian to Middle Triassic outcrops in the Wantou section and adjacent area. Morning: investing the PTB beds and Lower Triassic successions; Afternoon: examining the Olenekian-Anisian boundary section, the potential GSSP candidate section at Wantou. Staying overnight at the Fengshan town.
- June 10: Morning: visiting the Sanmenhai cave and Panyang river for sightseeing, the typical Karst landforms; Afternoon: moving back to Nanning, and then flying back to Wuhan. Staying overnight in Wuhan (included in Symposium).

Note: Participants need to arrive at Nanning city on the 6th of June 2020 or early morning (before 11:00 am) of 7th of June, 2020. Please make your own travel plan. The registration fee (**350 USD**) for this excursion includes all meals and accommodations from the 7th to 10th of June, 2020 and airfare from Nanning to Wuhan in the evening of 10th of June, 2020; This excursion does not provide accommodation for the 6th of June, 2020 in Nanning city.



The Fengshan country is a major part of Leye-Fengshan Word Geopark, situated in the transitional zone between the Yunnan-Guizhou Plateau and the Guangxi basin. The Geopark has two complete large subterranean river drainage systems, including karst windows, underground chambers, paleontological sites, and the largest tiankeng (Giant Doline) group in the world. It is a showcase for the evolution of typical and mature high cone karst, subtropical biodiversity, and the unique customs of ethnic minorities in southwest China. More information is available in the following link: http://www.lfgeopark.com/gyjs/15/show/71/1.aspx



The Nanpanjiang Basin is located in the south of the long-lived Yangtze shallow-water carbonate platform in South China. Sediments within the basin preserve thin, but continuous, successions of fine-grained carbonate-rich deposits. The uppermost Permian-Middle Triassic succession is composed of the Wujiaping, Luolou, and Baifeng formations. The Wujiaping Fm. consists of skeletal reef limestone, yielding abundant fossils typical of latest Permian faunas. The Luolou Fm is comprised of microbialites at its base, followed by ammonoids- and conodont-rich calcareous mudstone intercalated with shales of Dienerian-late Smithian age. Massive carbonate resumes from the early Spathian onward and persists throughout the entire Spathian. The overlying Baifeng Fm. comprises shale, siltstone and sandstone up the section.

The Wantou section (24.5915°N, 106.8625°E) at Jinya records a complete succession of the uppermost Permian to Middle Triassic, which represents facies changes from shallow platform to ramp to basin settings. The lithologic transition from carbonate domain (Unit V Luolou Fm.) to siliciclastic domain (Baifeng Fm.) is indicated by a major turning point in the geodynamic evolution of the Nanpanjiang Basin that records the general drowning of the Early Triassic shallow platform that immediately preceded the siliciclastic filling of much of the basin during the Olenekian-Anisian transition. This succession is punctuated by a series of fine- to coarse- grained volcanic ash layers, of which the thickest is known informally as the "Green Bean Rock", giving precise radiometric ages.

Post-Symposium field excursion to Xian City and adjacent Tongchuan areas in Shaanxi Province (3.5 days; June 14–17, 2020): Sightseeing in Xi'an City, one of the most well-known Chinese ancient capitals, and moving to Tongchuan area, investigating (1) terrestrial uppermost Permian to Upper Triassic successions, (2) collapse and re-building of terrestrial ecosystems over the P-Tr transition, and (3) extreme climate changes (indicated by well-preserved paleosols). Leader: Daoliang Chu (CUG) (daoliang chu@163.com)

Field Excursion Schedule:

- June 14: morning, traveling from Wuhan to Xi'an city by high-seed train, then moving to Tongchuan area by coach; afternoon, visiting the Qishuihe section to examine the P-Tr boundary succession, stay overnight at Tongchuan city;
- June 15: whole day, visiting the Triassic succession in the Qishuihe section; stay overnight at Tongchuan city;
- June 16: morning, moving to Xi'an City, visiting some famous sightseeing spots within the city; participants may travel around the city by themselves, but need to stay overnight at the same hotel; stay overnight at Xi'an City;
- June 17: morning, visiting the Northwest University Museum to inspect exceptionally preserved collections of the Chengjiang Fauna (early Cambrian); afternoon: departing China heading home in Xi'an City.
- Note: Field excursion is ended in the afternoon of 17th of June, 2020. Participants can choose to depart China from Xi'an City (airport) heading home in the afternoon of 17th or stayover in Xi'an and depart in the following day. Please make your own travel plan. The registration fee (500 USD) for this excursion includes all meals and accommodations from 14th of June to 16th of June, and meals (14th to 17th lunch) and ticket for high-speed train from Wuhan to Xi'an on 14th of June. This excursion does not provide accommodations for 17th of June in Xi'an City. This excursion offers the shared rooms for participants during the trip. If you hope to have a single room, please contact field excursion leader and pay an extra of 60 USD per person per night.



The city of Xi'an (Capital of Shaanxi province) was the first Chinese city to open up its doors to the Ancient world during the Tang dynasty. As the starting point of the Silk Road and one of the most important cities in Chinese history, Xi'an was the capital

for eleven dynasties with a history of more than 3000 years. This city was a world leader in culture and trade and played a vital role in bridging the gap between east and west during the Tang Dynasty. Xi'an is also renowned for Terracotta Army of Qin Dynasty. It was called Chang'an in ancient times. Aside from being a major tourist attraction and historical city, Xi'an has become an important cultural, industrial and educational center of the central-northwest region, with facilities for research and development and China's space exploration program. Xi'an is situated in the center of the Guanzhong Plains, surrounded by Mountains in the south and the Wei River in the north. More information is available in the following link:

http://www.sinohotelguide.com/xian/tour/index.html



The Qishuihe section is situated near the Tongchuan City, 100 km from Xi'an City (35.209°N, 109.056°E). An almost continuous outcrop records the Late Permian to Middle Triassic strata in the Qishuihe section. The P-Tr redbed succession is composed of the Sunjiagou, Liujiagou and Heshanggou formations. The Sunjiagou Formation consists of fine-grained sandstones, reddish siltstones and mudstones, containing Paleozoic-type plants and pareiasaurs. In addition, the Sunjiagou Formation contains marine bivalves and brachiopods in the Baoji and Tongchuan areas, which might indicate the occurrence of a transgression. Current researches suggest that the upper part of Sunjiagou Formation corresponds to the P-Tr transitional interval. The overlying Liujiagou Formation comprises reddish and brown-reddish fine-grained sandstones interbeded with siltstones and conglomerates. The Heshanggou Formation is composed mainly of purple siltstones and mudstones with diverse trace fossils.