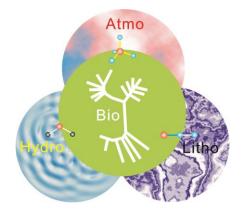
The 5th International Conference of

Geobiology

——Toward a habitable and digital Earth

June 10-13, 2020 Wuhan, China

Second CIRCULAR



http://www.geobiology.cn/2020meeting

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1. INVITATION

Dear colleagues and friends,

Geobiology is rapidly growing at the interface between geoscience and bioscience. As seen elsewhere in the world, geobiology in China received great attention in recent years by both scientists and administrative officials. Following the geobiology workshop in 2008, we organized four International Geobiology Conferences at Wuhan in 2010, 2012, 2014 and 2017. To explore the digital and habitable Earth on the geobiology perspective, we are going to hold the 5th International Conference of Geobiology in 2020 at Wuhan, central China.

The Chinese Organizing Committee, in collaboration with related national/international organizations and research institutes, is delighted to cordially invite you to the 5th International Conference of Geobiology. This meeting offers an important forum in which geologists, paleontologists, biologists, microbiologists, biogeochemists and other scientists with diverse approaches and methodologies can meet, and exchange ideas on a wide range of topics related to the coupling system of the biosphere and geosphere. We hope that such exchange and integration will accelerate the development of geobiology and the earth system sciences as a whole.

We look forward to seeing you at Wuhan in June, 2020. Sincerely, Zhong-Qiang CHEN & Chao LI Co-chairs of organizing committee

September 15, 2019

P.S.:There is a science-adjacent conference "The 4th International Symposium on Lunar and Planetary Science, <u>http://psi.cug.edu.cn/info/ISLPS2020.htm</u>", which will be held right after our Geobiology meeting (June 14-17, 2020) in the same hotel (i.e., New Beacon Luguang International Hotel). You are also welcome to it.

2. SPONSORS AND ORGANIZERS

Sponsors

National Natural Science Foundation of China Geobiology Society National Committee of Stratigraphy of China Ministry of Science and Technology Geological Society of China Paleontological Society of China Microbiological Society of China China University of Geosciences Nanjing Institute of Geology and Paleontology, Chinese Academy of Sciences (CAS) Institute of Vertebrate Paleontology and Paleoanthropology, CAS International Commission on Stratigraphy International Paleontological Association

Organizer

State Key Laboratory of Biogeology and Environmental Geology, China University of Geosciences (CUG, Wuhan)

Co-organizers

State Key Laboratory of Modern Paleontology and Stratigraphy, Nanjing

Key Laboratory of Evolutionary Systematics of Vertebrates, CAS, Beijing

3. ACADEMIC AND ORGANIZING COMMITTEE

Academic Committee (in alphabetical order)

Chair

Shucheng XIE, China University of Geosciences, Wuhan, China

Members

Ariel ANBAR, Arizona State University, USA Michael J. BENTON, University of Bristol, UK David BOTTJER, University of Southern California, USA Xu CHEN, Nanjing Institute of Geology and Paleontology, CAS, China Richard EVERSHED, University of Bristol, UK David A.T. HARPER, Durham University, Durham, UK Nianzhi JIAO, Xiamen University, China Andrew KNOLL, Harvard University, USA Kurt KONHAEUSER, University of Alberta, Canada Lee KUMP, The Pennsylvania State University, USA Timothy LYONS, University of California, Riverside, USA Yongxin PAN, Institute of Geology and Geophysics, CAS, China Birger RASMUSSEN, The University of Western Australia, Perth, Australia Joachim REITNER, University of Göttingen, Germany Jiayu RONG, Nanjing Institute of Geology and Paleontology, CAS,

China

Shuzhong SHEN, Nanjing University, Nanjing, China Degan SHU, Northwest University, Xi'an, China

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Roger SUMMONS, Massachusetts Institute of Technology, USA Chengshan WANG, China University of Geosciences, Beijing, China Paul B. WIGNALL, University of Leeds, Leeds, UK Hongfu YIN, China University of Geosciences, Wuhan, China Zhonghe ZHOU, IVPP, CAS, China

Organizing Committee (in alphabetical order)

Co-Chairs

Zhong-Qiang CHEN & Chao LI

Members

Tanja Bosak, Ying Cui, Tais W. Dahl, Hailiang DONG, Jan-Peter Duda, Xiaojuan FENG, Qiaomei FU, Xiumian HU, Xianyu HUANG, Guodong JIA, Xulong LAI, Yiliang LI, Yu LIU, Noah Planavsky, Dominic Papineau, Simon Poulton, Erik A. Sperling, Zhenbing SHE, Bing Shen, Guilian SHENG, Liang SHI, Xiaoying SHI, Jinnan TONG, Fengping WANG, Hongmei WANG, Yongbiao WANG, Yongdong WANG, Long XIAO, Shuhai XIAO, Wan YANG, Xunlai YUAN, Renbin ZHAN, Chuanlun ZHANG, Shihong ZHANG, Xingliang ZHANG, Yao ZHANG, Yundong ZHANG, Maoyan ZHU

Secretary in general

Genming LUO

4. PRELIMINARY SCHEDULES AND IMPORTANT DATES

Preliminary schedules

June 10, 2020: all day-registration

June 11-13, 2020: opening ceremony, plenary session, topic sessions and closing ceremony

Important dates

September 15, 2019: Release of 1st circular

November 31, 2019: Deadline for proposal of sessions and conveners

January 10, 2020: release of 2nd circular, opening of early-bird

registration and abstract submission

April 1, 2020: Deadline for early-bird registration and abstract submission

May 1, 2020: Release of Final circular

5. SCIENTIFIC PROGRAM

The official language of the conference is English.

Interaction and co-evolution between organisms and environments at critical periods of the geological history and in modern days will be the subject of this meeting. Tentatively, the following symposia are suggested, and more session proposals are encouraged before February 1, 2020. These symposia may be subdivided into sessions if more than a dozen presentations are included.

Theme 1. Precambrian geobiology

Session 1a. Biosignatures – assessing the habitability of early Earth and celestial bodies

Conveners: Long Xiao, Yiliang Li, Joachim Reitner

Session 1b. Earth's life and environments before the Great Oxidation Event

Conveners: Zhenbin She, Jan-Peter Duda, Dominic Papineau

Session 1c. From the Great Oxidation Event to boring billion: Co-evolution of life and environments

Conveners: Genming Luo, Shihong Zhang, Noah Planavsky

Session 1d. Understanding the Neoproterozoic-Cambrian Earth-Life system

Conveners: Chao Li, Bing Shen, Chuanming Zhou, Simon Poulton

Theme 2. Phanerozoic geobiology

Session 2a. Bio-diversification and evolution: mechanism and consequence

Conveners: Renbin Zhan, Haijun Song, Jacopo Dal Corso **Session 2b.** Phanerozoic mass extinctions and recoveries

Conveners: Jinnan Tong, Yuandong Zhang, Thomas Servais
 Session 2c. Evolution of vertebrates and terrestrial plants
 Conveners: Yongdong Wang, Zhaoqun Zhang
 Session 2d. Deep-time climate changes and mechanisms
 Conveners: Xiumian Hu, Jianghai Yang, David Kemp, Ying Cui

Theme 3. Geomicrobiology

Session 3a. Microbes-mineral interactions and geological consequences
Conveners: Jinhua Li, Deng Liu, Tomaso Bontognali
Session 3b. Geobiological reconstruction of paleoclimate
Conveners: Xianyu Huang, Guodong Jia, Yige Zhang
Session 3c. Microbial ecology and deep biosphere
Conveners: Hongmei Wang, Fengping Wang
Session 3d. Deep-time Geomicrobiology and modern analogue:
Methods and biosignatures
Conveners: Tanja Bosak, Genming Luo

Theme 4. Phylogeny and life macroevolution

Session 4a. RNA world, LUCA, and phylogenomic approaches to the origin of life

Conveners: Michael Benton Session 4b. Life tree and Phanerozoic geobiology Conveners: Guilian Sheng, Qiaomei Fu Session 4c. Genomics of microbial evolution Conveners: Haiwei Luo Session 4d. Hadal trench and Life evolution Conveners: Shunping He, Jiasong Fang, Xiang Xiao

Theme 5. Symposium on Triassic Integrated Stratigraphy and Biotic-Environmental Events

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

6. PARTIAL PLENARY/KEYNOTE SPEAKERS INVITED

- **Michael L. Benton,** Professor of University of Bristol, and Fellow of the Royal Society, UK. His research work focuses on global life trees and macroevolutions as well as P-Tr evolutions of marine and terrestrial ecosystems.
- **David J. Bottjer**, Professor of University of Southern California, Former President of the Paleontological Society, and Fellow of American Association for the Advancement of Science. His interest includes origin of animal life, mass extinctions and evolution in the oceans.
- **Paul Falkowski,** Professor of Rutgers University, and Academician of the United States Academy of Sciences. His research work focuses on phytoplankton and primary production, and his wider interests include evolution, paleoecology, photosynthesis, biogeochemical cycles and astrobiology.
- **David H.A.T. Harper,** Professor of Durham University, UK, and President of International Commission on Stratigraphy. He is a world-leading expert on Ordovician and Silurian integrated stratigraphy, ecosystem evolutions, and biotic mass extinction, recovery and biodiversification.
- **Kurt Konhauser,** Professor of University of Alberta, President of the Geobiology Society, and the editor-in-chief of Geobiology. His research work focuses on microbe-mineral interactions through time, origins of banded iron formations, Ancient paleo-redox conditions on Earth and Neoproterozoic glaciations and animal evolution.
- Timothy Lyons, Distinguished professor of biogeochemistry at UniversityofCalifornia-Riverside, andFellowofGeochemical

Society/European Association of Geochemistry. His primary research interests include astrobiology, geobiology, Earth history, and the search for life beyond our solar system.

- **Bénédicte Ménez,** Professor of Université de Paris (PR1) and Institut de physique du globe de Paris (IPGP). Her research work focuses on deep biosphere and deep carbon-nitrogen cycles.
- **Joachim Reitner,** Professor of Geobiology at University of Göttingen, and President of Paleontological Society of Germany. He is an expert in fields of sponge fossils and other geobiological aspects.
- James William Schopf, Distinguished Professor at University of California-Los Angeles, and Academician of the United States Academy of Sciences. His research interests involve origin of life, early life evolution and astrobiology.
- Paul B. Wignall, Professor of University of Leeds, UK. He is a world-leading expert on deep-time extreme environmental and biotic events (Triassic-Jurassic boundary, Permian-Triassic boundary, Guadalupian-Lopingian boundary, Frasnian-Famennian boundary, Ordovician-Silurian boundary mass extinctions and recoveries).
- **Shuhai Xiao,** Professor of Virginia Tech, and Fellow of American Association for the Advancement of Science. His research work focuses on early life evolution and Neoproterozoic geobiology.
- Jizhong Zhou, Professor of University of Oklahoma, and Fellow of American Association for the Advancement of Science. His research work focuses on genomics-enabled microbial environmental sciences. He is a senior editor for ISME Journal.

7. CALL FOR ABSTRACTS

All participants are invited to submit abstracts on all the related topics of the sessions listed above. All abstracts received by the committee will be peer-reviewed and linguistically edited. All abstracts are encouraged to submit as an email attachment (MSWord file) to Mr. Jun HU (hujuncug@163.com). The deadline of the abstract submission is

April 1, 2020.

Sample (size, one A4 printing page)

Title (Times New Roman, 12 point, bold)

Authors (Times New Roman, 10 point) Affiliations (Times New Roman, 10 point)

Abstract text (Times New Roman, 10 point)

References (Times New Roman, 8 point, less than 5 references)

Xie S., Pancost R. D., Chen L., Evershed R. P., Yang H., Zhang K., Huang J., Xu D., 2012. Microbial lipid records of highly alkaline deposits and enhanced aridity associated with significant uplift of Tibetan Plateau in late Miocene. Geology, 40, 291-294.

8. REGISTRATION FEES AND PAYMENT POLICY

Registration fees

All payments should be done online and the payment website will be open and offered in 2^{nd} circular on January 10, 2020.

Before April 1, 2020: formal participant 400 US\$, student 250 US\$, accompany 200 US\$. After April 1, 2020: formal participant 500 US\$, student 300 US\$, accompany 250 US\$.

Payment policy

All payments, including registration fee and accommodation fee, must be paid in US Dollar.

Cancellation policy

A 40 US\$ administration fee will be withheld for cancellations received in writing prior to **April 1, 2020**

No refunds will be issued after this date.

9. WEBSITES AND CONTACT

Website

http://www.geobiology.cn/2020meeting

will be accessible to participants after September 15th, 2019.

Contact

Jun HU, Tel : 086-15527725502; Email : hujuncug@163.com

Postal Address

State Key Laboratory of Biogeology and Environmental Geology, China University of Geosciences, No. 388 Lumo Road, Wuhan, Hubei Province, China, Postcode 430074

10. ACCOMMODATION

All activities of the conference (lecture, accommodation, and meals, etc.) will take place in the New Beacon Luguang International Hotel (4-star hotel) which is about 25-minute walk from the campus of CUG. The hotel to the shopping center is about 5-minute walk.

The organizer encourages all participants to accommodate in New Beacon Luguang International Hotel (4-star hotel). The cost is 60 US\$ per night for a standard double-bed or single-bed room with standard facilities.

The organizer will help to reserve the rooms on the 7th-17th floors for all the invitees and participants who have registered to attend the conference or submitted abstract(s).

The hotel address: No. 124 Minyuan Road, East Lake High-tech Development Zone, Wuhan. Tel: 0086-27-59361111, Fax: 0086-27-59254988;

Sale executive manager: Mr. Hao Wu, Tel: 0086 -27 -13006350652.



Images showing a standard single-bed room (left), and a standard double-bed room (right)

11. CONFERENCE VENUE

The 5th International Conference of Geobiology will be held in the New Beacon Luguang International Hotel (4-star hotel), Wuhan, China.

About Wuhan

You may browse the website <u>http://english.wh.gov.cn/</u> for the information related to Wuhan.

Wuhan is the capital city of Hubei Province in Central China. The Yangtze River and Hanshui River divide Wuhan into three parts: Hankou, Hanyang and Wuchang, which are generally known as Wuhan's Three Towns. The universities including CUG are located at Wuchang. Wuhan occupies a land of 8494.41km², most of which is plain and decorated with a great number of lakes. It has a population of about 8 million.

Wuhan belongs to subtropical humid monsoon climate. There are sufficient rainfall and sunshine as well as four distinct seasons. In recent thirty years, the average rainfall in June is 151mm, with 12 rainy days; the temperature in June ranges $22^{\circ}C\sim 30^{\circ}C$, with the mean temperature of $26^{\circ}C$.

Wuhan possesses strong economic and regional advantages. It connects the east with the west, channels the north to the south, and links rivers with seas by means of its developed water, land and air traffic. Some of China's metropolises such as Beijing, Shanghai, Guangzhou, Chengdu, and Xi'an are all within a circle around the center of Wuhan with the radius of 1000km. Wuhan is the important strategic supporting point of Central China.

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12. REPLY FORM

Please fill in the attached reply form and send it back to the contact persons listed above (hujuncug@163.com) before April 1, 2020.

The 5th International Conference of

Geobiology

—Toward a Habitable and Digital Earth June 10-13, 2020 Wuhan, China

REGISTRATION AND REPLY FORM

Register online at http://www.geobiology.cn/2020meeting Or mail this form to hujuncug@163.com

First Name	Last Name	
Accompany Name (If attending, please register below)		
Institution		
Address		
CityCountry	Postal (Zip) Code	
Email Address	Telephone	
Fax		

1. I plan to register as (please tick): Formal participant (),

Student (), Accompany ()

2. I am interesting in giving an oral presentation with the full title of

in the following session

3. I need to help with the reservation of the accommodation in the hotel (please tick) ()

4. My suggestions and comments of scientific sessions are :

Signature and date