

**Session title: Clean Energy and Dual Carbon Goals** 

Session Organizer: Aerospace Information Research Institute, Chinese Academy of Sciences Short Description

Focusing on the global realization of the UN Sustainable Development Goals 7SDG7 Economical and Applicable Clean Energy Goal, and aiming at the five major themes of SDG7 indicators: power supply, clean cooking, renewable energy, energy efficiency improvement and international cooperation, through literature research and collection, a list of key technologies for achieving the five major themes of SDG7 Economical and Applicable Clean Energy Goal in the world is formed. Through onsite discussions in the meeting, the importance of each key technology is discussed in detail. Then, through on-site scoring and voting, the importance of each key technology is evaluated, and a list of key technologies for the five major themes of SDG7 is finally formed, providing guidance for subsequent research on SDG7 goals.

## **Objectives**

Clarify the list of key technologies for SDG7

## **Expected Results**

SDG7 Key Technology List



**Agenda** 

Time 17:00-18:30, September 7th 2023 Room: 305 D Moderators:



SHAO Yun Researcher, Professor

## Aerospace Information Research Institute, Chinese Academy of Sciences

SHAO Yun, doctor, researcher of the Aerospace Information Innovation Institute of the Chinese Academy of Sciences. He has successively served as Deputy Director of the State Key Laboratory of Remote Sensing Science, Director of the Microwave Remote Sensing Research Office, and doctoral supervisor of the Institute of Remote Sensing Applications, Chinese Academy of Sciences; One of the participating scientists of the "Beijing Youth Science and Technology Club"; Torchbearer for the 2008 Beijing Olympics; I have been engaged in basic and applied research on radar remote sensing for a long time and am a well-known expert in the field of radar remote sensing applications in China. Representative of the 19th National Congress of the CPC.



WU Mingquan Associate Researcher Aerospace Information Research Institute, Chinese Academy of Sciences

WU Mingquan, doctor, master's supervisor, associate researcher of the Aerospace Information Innovation Research Institute of the Chinese Academy of Sciences, member of the Youth Innovation Promotion Association of the Chinese Academy of Sciences, has long been engaged in research on engineering remote sensing and agricultural remote sensing, and presided over more than 20 national and departmental projects such as the



National Natural Science Foundation of China, the annual report of global ecological environment remote sensing monitoring, etc. Systematically carrying out research on Earth big data monitoring and analysis for overseas engineering projects in China. Published over 100 papers, including nearly 30 SCI papers by the first author/corresponding author. Expert reviewers for international mainstream magazines such as Remote Sensing of Environment.

Participants

Event 1 (20 minutes)

Remote sensing estimation of terrestrial ecosystem carbon budget: methods and challenges



LIU Liangyun Researcher, Professor Aerospace Information Research Institute, Chinese Academy of Sciences

LIU Liangyun, Ph. D., researcher of the Aerospace Information Innovation Institute of the Chinese Academy of Sciences. The research direction is quantitative remote sensing and application of vegetation ecology. He served as the director of the Environmental Remote Sensing Branch of the Geographical Society of China, and undertook the postgraduate teaching of the "Vegetation Remote Sensing" course of the Graduate School of the Chinese Academy of Sciences. Received one second prize of the National Science and Technology Progress Award, one first prize of the Beijing Science and Technology Award, and one third prize each. Published over 100 journal papers both domestically and internationally, including over 20 SCI search papers and over 40 EI search papers; SCI has been cited more than 100 times by others. In 2006, he was selected for the Beijing New Century Billion Talents Project.

Event 2 (20 minutes)

Effects of afforestation on soil organic carbon and main nutrients



## 第三届可持续发展大数据国际论坛

The 3rd International Forum on Big Data for Sustainable Development Goals

2023年9月6日-8日 中国北京



BAO Haijun Professor Zhejiang University



GUO Yang Lecturer Zhejiang University

Dr. GUO Yang obtained her doctoral degree from the University of Aberdeen in the United Kingdom, majoring in Environmental Science. Her primary research interests include land use and carbon-nitrogen cycles, as well as low-carbon urban development. Dr. Guo has participated in multiple international/national level research projects, published 8 SCI papers, and contributed to the writing of 2 English-language books.

Event 3 (20 minutes)
GEOVIS Earth enpowers the exploration and practices of Carbon Peak and Carbon Neutrality





KUANG Qiuming
Senior Vice President
Geovis Environment Technology Co. Ltd

Ph.D. in Pattern Recognition and Intelligent Systems, served as Senior Vice President (CTO) of Geovis Environment Technology Co., Ltd., and Chairman of the Artificial Intelligence Technology Committee of the China Meteorological Service Association. He Mainly engaged in the application research of artificial intelligence technology in the meteorological field, authorized more than 10 invention patents in high impact weather recognition of remote sensing images, refined weather forecasting, automatic acquisition of meteorological service data knowledge and intelligent Q&A, and participated in writing two monographs.

Event 4 (20 minutes)
Big Earth Data Supports SDG7 Sustainable Development Goals



WU Mingquan
Associate Researcher
Aerospace Information Research Institute, Chinese Academy of Sciences

WU Mingquan, doctor, master's supervisor, associate researcher of the Aerospace Information Innovation Research Institute of the Chinese Academy of Sciences, member of the Youth Innovation Promotion Association of the Chinese Academy of Sciences, has long been engaged in research on engineering remote sensing and agricultural remote sensing, and presided over more than 20 national and departmental projects such as the



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**Discussion on Key Technologies of SDG7 (50 minutes)** 

Invite 6 experts to discuss key technologies for SDG7 monitoring and implementation.