

# **The International Young Scientist Forum on Engineering Geomechanics and Deep Geological Engineering**

## **Held in Beijing, China**

From September 15 to 17, 2023, co-organized by IAEG China National Group, IAEG Commissions, National Key Laboratory of Lithospheric Evolution and Environmental Evolution and the Key Laboratory of Shale Gas and Geological Engineering of the Chinese Academy of Sciences, Institute of Geology and Geophysics, Chinese Academy of Sciences (IGGCAS) hosted the "The International Young Scientist Forum on Engineering Geomechanics and Deep Geological Engineering" in Beijing, China. The conference focused on the fields of engineering geomechanics and deep geological engineering, exchanging research progress in deep resource and energy development and major projects among countries, and conducting in-depth discussions on the geomechanics mechanism, evolution laws, prediction methods, and prevention and control strategies of geological engineering.

The chairman of the academic committee is jointly held by Director Qingyun Di, IGGCAS and President Vassilis Marinos, IAEG. The chairman of the organizational committee is jointly held by Vice Director Liang Zhao, IGGCAS and Secretary General of IAEG China NG, Director of the Key Laboratory of Shale Gas and Geological Engineering of the Chinese Academy of Sciences Prof. Shengwen Qi. The opening ceremony was chair by Prof. Qi. And President Vassilis Marinos and Secretary General of IAEG and President of IAEG China NG Professor Faquan Wu delivered welcome speeches.

In the welcome speech, President Vassilis Marinos mentioned two outstanding predecessors in IGGCAS. One is Academician Gu Dezhen, who is the first president of IAEG China National Group. Gu is the person who looks far ahead from a high place, leading China join IAEG and

enter world stage. One is Academician Wang Sijing, IAEG Past President and IAEG Hans Cloos Medal Winner. Wang made great promotions for the development of IAEG in Asia. He is the founder of Asian Regional Conference of IAEG, which is one of the most important IAEG academic activities that continues to today.

Subsequently, keynote speakers Prof. Derek Elsworth and Prof. Michael Celia, both are Members of National Academy of Engineering (NAE), USA, President Vassilis Marinos, Vice President Ranjan Kumar Dahal, Prof. Zhongqi Yue and Prof. Shengwen Qi respectively addressed speeches on research on underground seismic activity and permeability, large-scale carbon dioxide storage in deep underground reservoirs, evaluation of deep underground tunnels and surrounding rocks, engineering geomorphology research in deep geological engineering exploration, soil fine classification and naming and strong seismic dynamic characteristics and disaster prediction of engineering rock masses.

At the same time, young scholars as invited speakers Associated Prof. Yifei Cui (IAEG RWP Winner), Associated Prof. Yanhui Dong, Associated Prof. Zan Wang, Associated Prof. Yan Zhang, Associated Prof. Yanlong Kong and Dr. Weiwei Zhu respectively discussed the risk warning methods for earthquake induced geological disasters, deep hydrogeological research, the application of machine learning in geological carbon sequestration, and the application of groundwater tidal response in cap rock constraints. We have conducted professional special reports on reservoir engineering research for large-scale utilization of geothermal energy and data-driven research on enhanced fracture network characteristics based on outcrop analysis.

The meeting ended at noon on September 17, 2023. Prof. Shengwen Qi delivered a closing speech. 12 scholars from Chinese Mainland, the United States, Greece, Nepal and other countries, as well as Hong Kong, China, made 12 academic speeches. The keynote speeches and invited speeches are of high academic level, making the forum a high-level academic feast. Young

scholars and outstanding scholars in the world have opportunities to exchange research progress face to face. It is also the benefit that the IAEG and IAEG China NG try the best to offer our members, especially young members.



Group photo



The Secretary General of IAEG China NG Prof. Shengwen Qi

chaired the Opening Ceremony



Welcome Speech by IAEG President Vassilis Marinos



Welcome Speech by The Secretary General, IAEG and President of IAEG China NG Faquan Wu



Prof. Derek Elsworth delivered an online academic speech



Certificate to Prof. Micheal Celia