The XIV Congress of the International Association for Engineering Geology and the Environment

XIV IAEG CONGRESS 2023 CHENGDU

Session 10-4

Mechanism, Monitoring, and Early Warning of Dynamic Disasters in Deep Underground Engineering

Conveners

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Brief Introduction of the Session:

The strategic planning of China's territorial space and the high-speed economic development requirements have greatly promoted the further transfer of projects such as resource exploitation, energy exploitation and infrastructure construction to the deep area, and the construction of deep underground engineering will become normalized. However, due to the complexity of geological environment and large scale of most deep underground engineering, dynamic disasters such as rock burst and surrounding rock deformation are frequent during construction. Moreover, the practice of deep underground engineering is far ahead of the basic theoretical research and engineering experience cognition, and the dynamic disasters of rock mass occurring frequently during the construction process of deep underground engineering have seriously threatened the safety of personnel and the smooth implementation of the project, which has become a bottleneck restricting the construction of the project. The dynamic disasters of deep underground engineering are the result of the joint action of complex geological environment and construction disturbance. How to capture and interpret the precursors of catastrophe in the process of dynamic disaster incubation of rock mass during construction period by means of on-site monitoring, establish a dynamic disaster prediction and early warning system, and provide strong scientific and technological support and solutions for the construction of deep underground engineering in China is an urgent scientific problem and technical challenge. Therefore, an academic exchange and discussion should be conducted regarding the rock engineering geomechanics principles, and disaster prediction and warning technology involved in the deep underground engineering dynamic disaster evolution mechanism, occurrence conditions, and monitoring and early warning methods, so as to further reveal the formation mechanism of the deep underground engineering dynamic disaster. Consequently, the field monitoring technique of the deep underground engineering can be improved, and the level of dynamic disaster prediction and early warning will be enhanced. The major strategic needs of serving the national deep engineering field can be satisfied.

IMPORTANT DATES

Abstract for Oral Presentation and Poster Submission Deadline	Early Bird Registration Deadline	Online Registration Deadline
Jun. 30, 2023	**Aug. 10, 2023**	**Sept. 21, 2023**

◆ SUBMISSION ◆

For the full-length submission
The submission system is now open for full-length papers. The deadline for submission of full-length paper has been extended to May 31, 2023. Please read the guidelines for paper submittal prior to submitting your full-length paper.
Please read the guidelines prior to submitting your full-length paper or long abstract at https://www.iaeg2023.org/cfp.html

For the abstract submission
The abstract submission system for oral presentations and posters is open! If you would rather prepare an abstract for an oral or poster presentation, rather than submitting a full paper, please submit your abstract for consideration by June 30, 2023.
Please read the guidelines prior to submitting your abstract at https://www.iaeg2023.org/cfa.html

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