

SEPT. 21-27, 2023  
CHENGDU, CHINA

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

Session 10-6

## Hazard Prevention and Control of Groundwater System



### Conveners



**Liping Li**

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### Brief Introduction of the Session:

Tunnels and underground engineering are the key to supporting the construction of major infrastructure such as transportation, municipal engineering, water conservancy, and hydropower. However, due to the complexity of geological conditions, especially under the coupling effect of unfavorable tectonics and groundwater, large-scale geological disasters, such as water and mud inrush, collapse, etc., often occur in the process of tunnel and underground engineering construction. Which often leads to serious project delays, casualties, economic losses, and environmental damage, and even worse, tunnel abandonment or relocation.

The prevention and control of geological disasters induced by groundwater has gradually become a key scientific and technological challenge restricting the development of tunnel and underground engineering construction. In order to promote interdisciplinary and interdisciplinary integration and innovation, and promote theoretical research, method innovation, and technological breakthroughs in disaster prevention and control of groundwater systems. This topic will discuss the following issues, but not limited to:

- The occurrence law and intelligent identification of unfavorable geological conditions in rock mass and groundwater system.
- Risk identification of geological hazards induced by catastrophe in rock mass and groundwater system.
- Evolution mechanism and numerical method of geological hazards induced by catastrophe in rock mass and groundwater system.
- New concepts, methods, technologies, and equipment for intelligent disaster prevention and reduction.
- The application of advanced technologies such as 5G, Internet of Things, numerical simulation, artificial intelligence, and robotics in tunnel disaster prevention and reduction.

## IMPORTANT DATES



Abstract for Oral Presentation and  
Poster Submission Deadline

**Jun. 30, 2023**



Early Bird Registration Deadline

**Aug. 10, 2023**



Online Registration Deadline

**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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