

Session 10-2
Large Deformation of Squeezing or Intensively Fractured Rocks



Conveners



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Brief Introduction of the Session:

Deformation and strength are two of the most fundamental issues in geotechnical engineering. With the increase of excavation depth and the tunnel engineering development, a large number of tunnels and roadways need to pass through soft rock formations, in which the problems such as high geo-stress and fractured surrounding rocks are prominent. Large deformation disasters of soft rocks pose serious threats to engineering safety and cause enormous economic losses. For example, the Yangjiaping Tunnel of the Chengdu-Lanzhou Railway, the Muzhailing Highway Tunnel, and the Wushaoling Tunnel of the Lanzhou-Xinjiang Duplication Line all have high geo-stress soft rock deformation problems. The control of soft rock large deformation requires comprehensive consideration of the surrounding rock stress and its evolution, the strength characteristics of the surrounding rock, the failure evolution mechanism of discontinuities and anchoring joints, groundwater and other factors, and requires reasonable control methods for different causes of soft rock deformation.

This topic will discuss the following issues, but not limited to:

- Methods for the inversion and resolution of tunnel geo-stress fields and patterns of high geo-stress emplacement
- Theory and scientific experimental methods for determining the strength of soft jointed surrounding rock masses
- Mechanical properties of large deformation-prone surrounding rock under multi-field coupling
- Nonlinear deformation behaviors and the new methods for the classification and prediction of large deformation of the soft rock tunnel
- Intelligent monitoring and early warning control platform for large deformations in soft rock tunnels
- Theory and key technologies for collaborative control of support systems in large deformation tunnels

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>

