

SEPT. 21-27, 2023
CHENGDU, CHINA

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

Session 12-3

Creep Characteristics of Rock and Soil Mass



Conveners



Xingang Wang

Northwest University



Gianvito Scaringi

Charles University



Stefano Alberti

Oregon State University



Shun Wang

Wuhan University



Peng Xin

The university of national resources and life science, vienna



Abdoullah Namdar

Iran university of science and technology



Wen Nie

State Key Laboratory of Metal Mine Safety and Health, China

Brief Introduction of the Session:

The majority of rock and soil mass is undergoing creep deformation as a result of the interaction between time and space. Ignoring the creep characteristics of rock and soil mass may lead to catastrophic consequences, causing geological hazards such as landslides, collapses, mudslides, and other geological disasters. Numerous practices have shown that creep of rock and soil mass plays an important role in the formation and evolution of geological hazards. Nowadays, important tools like indoor mechanical tests, physical model tests, field monitoring, as well as theoretical and technical aspects of early warning and prevention measures for geological hazards, are used in the study of creep characteristics of rock and soil mass and its disaster mechanism. Additionally, with the intensification of human engineering activities and the frequent occurrence of extreme weather, it is necessary to take into account and carefully analyze the way and extent of the coupling effects of internal dynamics (strong earthquakes, high stresses, crustal uplift, etc.) and external dynamics (extreme rainfall, engineering excavation, locomotive vibration, freeze-thaw cycles, ice avalanches and avalanches, artificial irrigation, etc.) on the creep characteristics of rock and soil mass.

With the application of new theory, new technology, new method, new material and new equipment in the study of creep characteristics of rock and soil mass, more and more scientists with diverse backgrounds are studying the creep characteristics of rock and soil mass and its disaster-induced mechanism. In particular, the development of "sky-space-ground" long time series intelligent monitoring technologies such as InSAR, close-range photogrammetry, modern sensors and the Internet of Things, as well as the application of new generation information technologies such as big data, cloud platform and artificial intelligence, have brought new opportunities to reveal the creep properties of rock and soil mass and its disaster-induced mechanisms in recent years.

The scientists working in the field of creep properties of rock and soil mass and its mechanisms are invited to present their recent advancements. In addition, contributions from practitioners and decision makers are also welcome.

Topics of the session include: indoor mechanical tests, physical model tests, field monitoring, theories and techniques for long-term monitoring, early warning and prevention measures of geological hazards.

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>



www.iaeg2023.org

Tel: +86-28-84073193 / +86-135 4003 2551

E-mail: info@iaeg2023.org; IAEG2022@cdut.edu.cn