SEPT. 21-27, 2023 CHENGDU, CHINA

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



Session 8-2

Recent Development of Numerical Models for Simulating Geohazard Processes and Chains of Geological Hazards

Conveners



Guangqi Chen

Central South University

Kyushu University

Zheng Han

Tingkai Nian



Dalian University of Technology Yanqiang Wu

China Earthquake Administration



Lu Zheng Fuzhou University

Yingbin Zhang Southwest Jiaotong University

Brief Introduction of the Session:

Mitigation and prevention against earthquake-induced geohazards, such as landslides, debris flows, collapse, and hazard chains, are strongly dependent on the understanding of hazard mechanism and risk assessment. The use of computational numerical simulation, which are either continuous- or discontinuous-model based, providing abilities for predicting and back-analyzing hazard process with spatial and temporal results, has become an integrated and beneficial solution for this purpose. In particular, up-to-date development of numerical models based on Discontinuous Deformation Analysis (DDA), Discrete Element Method (DEM), Smoothed Particle Hydrodynamics (SPH), etc., show tremendous ability and potential for better reproducing geohazard process. This session aims to provide an opportunity to share state-of-the-art and scientific knowledge in recent research and applications in numerical technologies for geological hazard simulation. Topics of particular interest include, but are not limited to:

- Experimental studies and numerical -based verification for geohazard mechanisms.
- Improvements in numerical models for simulating geohazard and hazard chains.
- Advances in geological hazard risk assessment models boosted by machine learning and numerical modelling.
- Geological hazard assessment methods coupling remote sensing (RS) and geographic information systems (GIS) with numerical models.
- Latest practical applications of numerical models for geological hazard prevention and mitigation purposes.

Important Dates Abstract for Oral Presentation and Poster Submission Deadline Jun. 30, 2023 Aug. 10, 2023 Online Registration Deadline 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