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



Session 8-15

Numerical Methods for Engineering Geology and Geohazards

Conveners



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Brief Introduction of the Session:

Most of the processes and phenomena in engineering geology and geohazards involve complex Multi-phase, Multi-process and Multi-scale problems ("3M"). In recent years, with the rapid development of numerical methods and computer hardware, researchers have taken advantage of different numerical methods in solid mechanics (e.g., DEM FEM, MPM, etc.), fluid mechanics (e.g., SPH, LBM, FVM, etc.) and their coupling algorithms for analysis and study the "3M" problems to achieve tremendous advantages. Therefore, developing risk analysis modeling using numerical simulation is a key scientific challenge for effective disaster risk reduction and engineering problems.

This session focuses on the developing numerical method as well as their coherence with the mechanisms of compound hazards. The topics of the presentation include but not limited to:

- Advanced numerical method, the improvement and development of numerical algorithms, the latest progress, large-scale parallel computing technology, and software.
- Case study using numerical simulation of compound geohazards at local scale and global scale.
- Advances in risk analysis method by integrating hazard simulation and vulnerability assessment.
- Numerical method for the optimizing the engineering design for current hazard mitigation and control structure.

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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