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CHENGDU, CHINA

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

Session 2-1

Extreme Climate, Soil and Water Conservation, and Sustainable
Development in Semiarid Regions



Conveners



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Brief Introduction of the Session:

Arid and semi-arid regions occupy 41 % of global land areas, supporting approximately 1/3 of the global population and producing 45 % of food production. Due to limited rainfall and increasing human impacts, the eco-environment of the arid and semiarid regions is very fragile. During the past decades, people have utilized a series of eco- and geo-engineering measures to suppress natural disasters, conserve soil and water and improve sustainable development in the area. However, extreme climatic events in the arid and semiarid regions become more and more frequent in recent years, e. g. heavy rainfall, drought. These climatic extremes have not only imposed a huge negative impact on the regional ecosystem, but also result in the failure of the eco- and geo-engineering measures that applied in the area. Currently, these negative impacts have threatened the eco-environmental sustainability of the arid and semiarid regions, especially the loess-covered semiarid areas. Over the past, engineering geologists mainly focus on geological disasters, like landslides, land subsidence, debris flow, ground fracture et al. As global society begins to pay more attention to eco-environmental sustainability and emphasize the harmonious coexistence between human and nature, a new cross-discipline, ecological engineering geology and environmental protection has emerged and rapidly developed in recent years. This new cross-discipline requires engineering geologists, ecologists and environmental scientists work together to deal with the issues of engineering, ecological and environmental problems. This issue is crucially important for the ecological engineering geology and environmental protection research under the background of global change in the future. The motivation of this session is to organize cross-disciplinary scientists to share their knowledge, idea and advancement of research and built a collaboration bridge to push the research of extreme climate, soil and water conservation and sustainable development in the arid and semiarid regions around the world. This topic will discuss the following issues, but not limited to:

- Extreme rainfall, soil and water loss and land degradation in semiarid regions
- Extreme drought and agriculture sustainability in semiarid regions
- Risks of soil and water conservation measures under the impacts of extreme climate
- Sustainable ecological and geological measures for soil and water conservation
- Ecosystem and agriculture resilience and sustainability under global change
- Sustainable relationships between climate, human, agriculture and ecosystem

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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