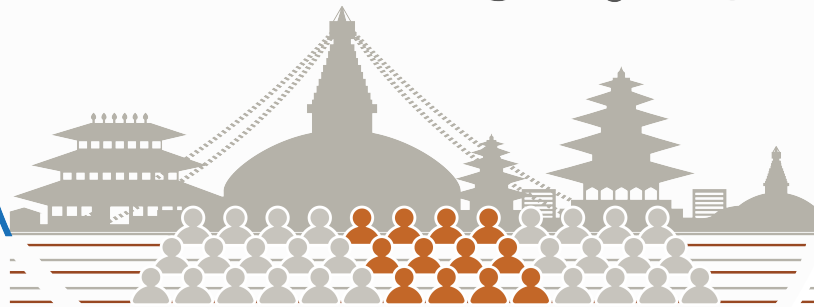


Geotechnical Model Competition 2023

on Geohazards and Geo-Infra Disasters

1st
GeoMandu



NGS international conference series
(Since 2023)

1st Selection

Date: 26 Feb 2023

Venue: Institute of Engineering (IoE),
Pulchowk Campus

Final Competition

Date: 17 Mar 2023

Venue: Radisson Hotel Kathmandu

Organizer:



Title Sponsor:



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1. A Brief Introduction to Nepal Geotechnical Society

Nepal Geotechnical Society (hereinafter NGS) is a scientific forum of engineers and scientists involved in the fields of general civil engineering, geotechnical engineering, and geosciences. It was established by an enthusiastic and truly dedicated group of geotechnical engineers and academics of Nepal back in 1994 so as to deal with massive geotechnical challenges and bring in to effect geotechnical engineering design and practices together with the development of education and research in the country.

Apart from various national seminars and guest lectures, NGS is involved in international activities through its affiliation with the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) for more than two decades.

2. GeoMandu-An NGS International Conference Series

The first ever NGS international symposium we organized was in 2014, but starting this international conference in March 2023, we plan to hold the NGS international conference series on a regular basis every two years in the name of GeoMandu.

As a developing nation with an insignificant number of geotechnical engineering-related infrastructures so far, Nepal has recognized geotechnical engineering still as a minor field of engineering! Today, however, there are many ongoing national pride infrastructure development projects including four-lane fast track highway construction, roadway tunnels, multipurpose high gravity dams, underground structures, long-span bridges, heavy aircraft runways, and many others that necessitates precise knowledge of geotechnical engineering in order to reduce the risk of geo-infra disasters in future. So, through this conference series, we expect that the geotechnical engineering community in Nepal will be able to appeal to all stake holders of Nepal as well as to our international colleagues our unique geohazard types, and geo-infra disaster issues of the Nepal Himalaya and share the problems and learn about the solutions.

3. Program Description

3.1 Project model competition

NGS invites all civil engineering, geotechnical engineering, and engineering geology students from bachelor and master levels to present their physical model work in this competition. The Geotechnical Model Competition, 2023 is a design competition that involves designing, building and demonstrating a model of geotechnical engineering product or system.

The competition coordinated by Geotechnical Youth Committee encourages creativity and problem-solving skills among the participants to grow desire in geotechnical engineering as they place their imagination, problem-solving skills and workmanship to the model.

The goal of the competition is to give participants an opportunity to use the geotechnical engineering design process and build the project representing geoscience and its engineering.

3.2 Themes

Although the themes of this competition are planned to accommodate the below topics, the participants can go beyond these topics in the field of geosciences and geotechnical engineering.

- Slope Failure, Ground shaking, Liquefaction, Settlement
- Glacial Lake Outburst Flood
- Ground improvement techniques
- Geotechnical structures; Soil Structure Interaction; Geotechnical disasters led by the failure of Engineering structures
- Slope protection systems, Hazard management practices
- Ground water related problems/solutions
- Any other contents related to Soil Mechanics, Foundation Engineering and Engineering Geology

4. Competition Format

The competition is divided into two parts, namely model building and presentation.

4.1 Model building

Teams will be given almost 30 days to complete their models, which shall conform to the specifications provided. Teams shall follow the rules, regulations and conditions of the competition, provided by NGS.

4.2 Presentation

The teams have to build and demonstrate a model before the panel of judges. Each team should prepare a 300 words Summary about the design, explaining the principles applied and their idea generation process, drawings and Economic analysis (if any).

5. Evaluation Criteria

The following evaluation criteria are made to assess the model.

S.N.	Topic	Weightage
1.	Relevancy to the Topic	20%
2.	Impact of model	20%
3.	Uniqueness	20%
4.	Audience Appeal	20%
5.	Demonstration Technique	20%
Total		100%

NGS reserves all rights of the competition except the results of the competition, which shall be at the discretion of the judges.

5.1 Judge committee

Prof. Dr. Amod Mani Dixit - Professor & Chair, CMC UESC

Er. Mandakini Karki

Dr. Bharat Mandal

Er. Bharat Bahadur Dhakal

Dr. Basanta Raj Adhikari

Er. Nareshman Shakya

Er. Mohan Prasad Acharya

6. Registration

Participating teams must consist of undergraduate/graduate students from different engineering colleges and geoscience-related departments of Nepal, and at the most, six members will be accepted in one team. The student teams are required to register their team and build a model within the time frame set by the organizing committee.

Entry Fee: Rs.5,000 per team (Each College can send up to three (3) teams).

7. Prizes

- First Prize: Rs. 25,000 and an opportunity to participate in the model demonstration at the International Conference(GeoMandu), Radisson Hotel
- Second Prize: Rs. 15,000 and opportunity to participate in model demonstration at the International Conference (GeoMandu), Radisson Hotel
- Third Prize: Rs. 10,000 and opportunity to participate in model demonstration at International Conference (GeoMandu), Radisson Hotel

Two more teams will get a Consolation Prize of an opportunity to participate in the model demonstration at the International Conference (GeoMandu), Radisson Hotel.

All the five winner teams will get Gift Vouchers, Lunch and Dinner at the Conference Day. Trophies will also be given to the winner team members.

8. Program Summary

Application deadline: 14 Magh 2079 (i.e., 26 January 2023)

Date of competition: 14 Falgun 2079 (i.e., 26 February 2023); Time: 9AM to 5PM

Venue: Institute of Engineering (IoE), Pulchowk Campus

9. Contact Person

Please feel free to contact any of the following members for any enquiries.

Model Competition Committee:

Suvarna Singh Raut, Coordinator

Geotechnical Engineer

9851310767

suvarna.singhraut@gmail.com

Ujjwal Niraula, Member Secretary

Geotechnical Engineer, Lecturer

9843272127

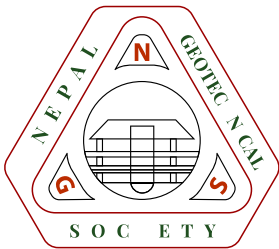
Email: 076msgte020.ujjwal@pcampus.edu.np

Rajan K.C., Member

Geotechnical Engineer

9851337662

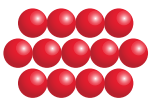
Email: rkpramod15@gmail.com



Nepal Geotechnical Society (NGS)

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