

The 2nd Badong International Geohazards Symposium (BIGS2019)

--- Prevention and Control of Reservoir Geohazards and Ecological
Environmental Protection

Symposium Manual



Organizer

Department of Geosciences, National Natural Science Foundation of China
China University of Geosciences (Wuhan)
People's Government of Badong County, Hubei Province

Co-organizer

China Three Gorges University

Sponsor

Hubei Association for Science & Technology
K.C. Wong Education Foundation
Shanghai Huace Navigation Technology Co., Ltd.
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24- 25 August 2019

Badong·Three Gorges·China

Background

The 2nd Badong International Geohazards Symposium (BIGS2019) will be held in Badong County in the Three Gorges Reservoir Area, Hubei Province, China on August 24-25, 2019. BIGS2019 is organized by Department of Geosciences, National Natural Science Foundation of China, the China University of Geosciences (Wuhan) and People's Government of Badong County, Hubei Province, co-organized by the China Three Gorges University. The two-day symposium consists of academic speeches, poster presentations and field trips. Academic speeches include keynote speeches (25 minutes), and parallel session presentations (20 minutes). Poster presentation with 750mmx1000mm layout will be exhibited according to the topics. The investigation objects of field trips include typical geological hazards in the Three Gorges Reservoir Area, the Badong field large-scale comprehensive experimental station of China University of Geosciences (Wuhan), the Wu Gorge and the Shennong River.

Symposium Date and Venue

Symposium date: 24-25 August, 2019

Symposium venue: Dongsheng Jiuzhou International Hotel, Badong County, Hubei Province

Address: 132 Yanjiang Avenue, Badong County, Hubei Province

Tel: 0718-5028888

Symposium Organizer

Scientific Advisory Committee

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Program Overview

日期	时间	事项
2019/8/23	8:00-23:00	Registration
2019/8/24	8:00-8:30	Opening Ceremony
	8:40-10:20	Keynote Speech (Session I): Forecasting of Geohazards and Stability Assessment
	10:30-12:10	Keynote Speech (Session II): Risk Assessment and Trigger Mechanism of Geohazards
	14:00-17:30	Field Trip
	19:00-22:00	Parallel Session Presentations
2019/8/25	8:00-11:30	Field Trip
	13:30-16:00	Keynote Speech (Session III): Monitoring, Testing and Control of Geohazards
	16:10-18:15	Keynote Speech (Session IV): Evolution Mechanism of Geohazards
	18:15-18:30	Concluding Remarks
	19:00-22:00	Free talk
2019/8/26	Conference end. Depart from Badong or attend optional activity.	

Program Details

Date	Time	Events	Reporter	Anchorperson	Location/Notes
2019/8/23	8:00-23:00	Registration		Prof. Weifu Teng	Lobby
	19:00-	Welcome Banquet			Banquet Hall
2019/8/24	8:00-8:30	Opening Ceremony		Prof. Huiming Tang	Main Lecture Hall
	8:30-8:40	Tea Break (Conference Photo)			
	8:40-10:20	Keynote Speech (Session I): Forecast of Geohazards and Stability Assessment			
	8:40-9:05	Development of an early warning system for shallow landslides in the tropical Andes (Medellín; Colombia)	Prof. Kurosch Thuro	Prof. Charng Hsein Juang and Prof. Faquan Wu	
	9:05-9:30	Evaluation and classification of slope condition and stability using the slope code system	Prof. Bo-An Jang		
	9:30-9:55	Hydrogeologic controls of the Huangtupo landslide, Three Gorges Reservoir Region, China	Prof. Robert E. Criss		
	9:55-10:20	Unravelling the effect of a two-layer system on the mobility of rapid gravitational flows	Prof. Theo van Asch		
	10:20-10:30	Tea Break			

Date	Time	Events	Reporter	Anchormperson	Location/Notes	
2019/8/24	10:30-12:10	Keynote Speech (Session II): Risk Assessment and Trigger Mechanism			Prof. Mauri McSaveney and Prof. Bin Shi	Main Lecture Hall
	10:30-10:55	Risk assessment and stress testing concepts for improved safety of large dams	Prof. Farrokh Nadim			
	10:55-11:20	Estimating initial failure surface depths and volumes based on surface information	Prof. Michel Jaboyedoff			
	11:20-11:45	Geo-hazards in the Three Gorges Reservoir area-insight from decades of research	Prof. Huiming Tang			
	11:45-12:10	Predicting river blockage, early identifying the dam forming, and rapidly evaluating the hazards of landslide dam – a review	Prof. Jia-Jyun Dong			
	12:10-13:10	Lunch				Banquet Hall
	13:10-14:00	Noon Break				
	14:00-17:30	Field Trip			Dr. Chengren Xiong	
	17:30-19:00	Dinner				Banquet Hall
	19:00-22:00	Parallel Session Presentations(See next table for more details)				The second meeting room

Date	Time	Events	Reporter	Anchorperson	Location/Notes	
2019/8/25	8:00-11:30	Field Trip		Dr. Chengren Xiong		
	11:30-13:30	Lunch and Break			Banquet Hall	
	13:30-16:00	Keynote Speech (Session III): Monitoring, Test and control of Geohazards				Main Lecture Hall
	13:30-13:55	Solid Earth tides as contributors to landslide triggering	Dr. Vicki Moon	Prof. Bo-An Jang and Prof. Xinli Hu		
	13:55-14:20	A Multi-mechanical, multi-phase mass flow model –A new paradigm in simulating complex cascading mass flows	Prof. Shiva P. Pudasaini			
	14:20-14:45	Integrated monitoring and early warning technology for deep-sea geological disasters	Prof. Yonggang Jia			
	14:45-15:10	Analysis of mechanical stability of slopes. Compact representations of factor of safety and similarity of failure surfaces	Prof. Carlos Carranza-Torres			
	15:10-15:35	Applicability of microbial method for soil slope surface erosion control	Prof. Chaosheng Tang			
	15:35-16:00	Experimental and numerical analysis of the extreme rock failures under high-stress conditions	Dr. Murat Karakus			
	16:00-16:10	Tea Break				

Date	Time	Events	Reporter	Anchorperson	Location/Notes	
2019/8/25	16:10-18:15	Keynote Speech (Session IV): Evolution mechanism of Geohazards			Prof. Farrokh Nadim and Prof. Hengxing Lan	Main Lecture Hall
	16:10-16:35	Effects of rainfall, weathering, and river incision on landslide generation	Prof. Masahiro Chigira			
	16:35-17:00	Evolution mechanism and stability of pile reinforced reservoir landslide physical model testing	Prof. Xinli Hu			
	17:00-17:25	Engineering Geological Process which cause accident on dam walls	Prof. Kiril Anguelov			
	17:25-17:50	What caused the 1991 landslide disaster at Touzhai village, Zhaotong, Yunnan: a geomorphic appraisal of the residual landslide risk	Prof. Mauri McSaveney			
	17:50-18:15	A new method to predict the occurrence of rock burst	Prof. Shengwen Qi			
	18:15-18:30	Closing Address		Prof. Changdong Li		
	17:30-19:00	Dinner				
	19:00-22:00	Free talk			The second meeting room	
2019/8/26	Conference end. Depart from Badong , or attend optional activity.					

Note: Main Lecture Hall and Banquet Hall are on the fourth and third floor separately.

Program for Parallel sessions presentations

Session 1. Monitoring, Evolution Process, and Stability Assessment of Geohazards

Date	Time	Topic	Reporter	Institute	Host	Location/Notes
2019/8/24	19:00-19:20	Monitoring Three Gorge Area Landslide by SAR Interferometry : Preliminary Results along Badong and Wushan River Bank	Tao Li	Wuhan University	Yahong Deng Fudong Chi	Main Lecture Hall
	19:20-19:40	Early-warning system with quasi-distributed fiber optic sensor networks and cloud computing for soil slopes	Dongsheng Xu	Wuhan University of Technology		
	19:40-20:00	Genesis and predictive simulation basing on analytic stochastic model of the river valley contraction induced by the impoundment of Xiluodu reservoir	Chao Zhuang	Hohai University		
	20:00-20:20	Estimation of the fundamental geotechnical parameters for geohazard analysis in granular sites using the non-invasive seismic surveying	Ehsan Pegah	Huazhong University of Science And Technology		

Date	Time	Topic	Reporter	Institute	Host	Location/Notes	
2019/8/24	20:20-20:40	Development of Monitoring Probe for Horizontal Distribution of Landslide Displacement	Guiying Lu	China University of Geosciences (Wuhan)		Main Lecture Hall	
	Short Break						
	20:50-21:10	Rainfall-induced landslide mechanism and reliability analysis considering spatial variability of multiple soil parameters	Shuihua Jiang	Nanchang University	Qing Lv Wenping Gong		
	21:10-21:30	Reliability analysis of unsaturated soil slope using Bayesian-spatial random field method	Changhong Wang	Shanghai University			
	21:30-21:50	Assessment of dynamic compaction on mitigation of liquefaction hazards	Mengfen Shen	Zhejiang University of Technology			
	21:50-22:10	Some Problems and Reflections on the Study of the Impact Force Models of Debris Flow	Xiao Liu	China University of Geosciences (Wuhan)			
22:10-22:30	Dynamic site response analysis of uncertainty-an approach based on response surface method	Wenxin Liu	Zhejiang Sci-tech University				

Session 2. Evolution Mechanism, Forecasting and Prevention of Geohazards

Date	Time	Topic	Reporter	Institute	Host	Location/Notes	
2019/8/24	19:00-19:20	Characteristics and formation analysis of Siwancun Landslide based on fine susceptibility mapping and multi-source data	Haijia Wen	Chongqing University	Bin Zhang Qingbing Liu	The second meeting room (opposite to main lecture hall)	
	19:20-19:40	Physical modeling and numerical analysis of seismic response of embankment on liquefiable sloping grounds in reservoir immersion zone	Yanguo Zhou	Zhejiang University			
	19:40-20:00	Typical failure mode of soil arch behind cantilever anti-slide pile in strong earthquake zone	Xiaoyan Zhao	Southwest Jiaotong University			
	20:00-20:20	Fractured Porous Medium Flow Analysis Using Numerical Manifold Method with Independent Covers	Qihua Zhang	China University of Geosciences (Wuhan)			
	Short Break						
	20:30-20:50	Effects of drying-wetting cycles on hydraulic properties of a cracked soil	Qing Cheng	Nanjing University	Haijia Wen Ling Xu		
	20:50-21:10	Mechanisms of crack initiation and propagation in clayey loess related to desiccation using a correlation image method	Xin Wei	Xi'an Jiaotong University			

Date	Time	Topic	Reporter	Institute	Host	Location/Notes
2019/8/24	21:10-21:30	Prediction for shallow landslides based on the time history of tilting of slope surface	Jiren Xie	Central South University	Haijia Wen Ling Xu	The second meeting room (opposite to main lecture hall)
	21:30-21:50	Characteristics and mechanism of translational landslides in Three Gorges Reservoir, China	Wenxing Jian	China University of Geosciences (Wuhan)		
	21:50-22:10	Staring Spotlight TerraSAR-X Advanced Persistent Scatterer interferometry for Identification and Monitoring of Landslide Deformation	Zechao Bai	Earth STAR Inc.		

Field Trip

Route 1: Dongshengjiuzhou Hotel (main venue) — Baodong Yangtze River Bridge — Shijiapo landslide: The route exhibits the general situation of geohazards in the Three Gorges Reservoir Area, and the prevention history of Shijiapo landslide.

Route 2: Dongshengjiuzhou Hotel (main venue) — Yanjiang Road — Huangtupo Landslide (Badong field test site): The route exhibits the Huangtupo landslide, as well as the prevention, monitoring and research history, and the multi-tunnel system, in-situ experiments and monitoring condition of the Badong field test site.

Route 3: Dongshengjiuzhou Hotel (main venue) — Shennong River (By boat): The route exhibits the valley and karst geomorphology in the Shennong River, the boat tracker exhibition hall and the Tujia minority culture show.

Route 4: Dongshengjiuzhou Hotel (main venue) — Wu Gorge (By boat): The route exhibits the geomorphology and geological environment of Wu Gorge, and the construction situation of new Badong County.

Poster

Poster presentation will be exhibited according to the topics. The poster requires one or two 1000×750mm layouts, which are printed and taken to the venue by authors. The poster will be exhibited on the fourth floor.

Conference Fee

The conference fee is 1400 RMB for general attendee and 700 RMB for student attendee, except for the invited academics. The conference fee will be available when on-site registration.

Traffic and Accommodation

Traffic:

Volunteers will be settled in Badong railway station, East Yichang railway station and Yichang Sanxia Airport for guiding the traffic on August 23. Badong railway station is the main pick-up location of this symposium. The following three routes are recommended.

(1) From Badong railway station to Dongshengjiuzhou Hotel

The organizers contacted the passenger transport company to provide the coach-bus at the Badong railway station (35 RMB per person, every 30 min one bus during the time 7:00 to 19:00) on August 23, and take off the coach-bus in the front of the Dongsheng Jiuzhou hotel 1.5 hour after departure.

(2) From East Yichang railway station to Dongshengjiuzhou Hotel

Leave the railway terminal and walk to the Yichang coach-bus central (5 minutes walk). Purchase the ticket for the coach-bus from Yichang to Badong (90 RMB per person, every 60 min one bus during the time 6:50 to 18:00) and take off the coach-bus in the front of the Dongsheng Jiuzhou hotel 3.5 hours after departure.

(3) From Yichang Three Gorges Airport to Dongsheng Jiuzhou Hotel

Take the airport shuttle bus or taxi to the Yichang coach-bus central (about 25 km, with the reference price 40-50 RMB for taxi and 25 RMB for coach-bus) and then take the coach-bus referring to route (2).

Accommodation:

The main conference venue is Dongsheng Jiuzhou hotel and nearby hotels. Dongsheng Jiuzhou hotel has many room types, with the price from 159 RMB /day to more than 500 RMB /day. If you need to book the room of the Dongsheng Jiuzhou hotel, please contact the organizer by Email or telephone. The price of hotels near the main venue is about 120~160 RMB /day. The

attendees may also book the accommodation by them yourself though internet.



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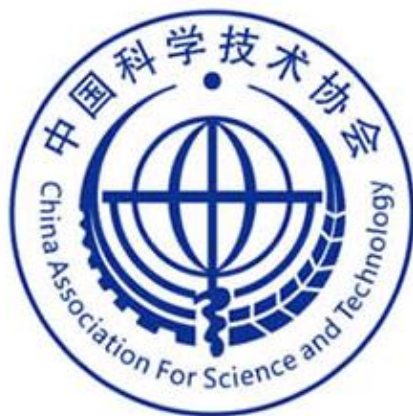
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