

An International Geoscientific Event

9TH NEPAL GEOLOGICAL CONGRESS (NGC-IX)

Organized by:



Nepal Geological Society (NGS)

CONGRESS REPORT

In Collaboration with:



National Planning Commission

National Reconstruction Authority

President Chure-Terai Madesh Conservation

Development Board

Department of Water Resources and Irrigation

Department of Mines & Geology

Kathmandu Metropolitan City



NSET

Earthquake Safe Communities in Nepal



**Tribhuvan University
Department of Geology**

**19-21 November 2018
Kathmandu, Nepal**

1. Background

Nepal Geological Society (NGS) is one of the most dynamic professional organizations in Nepal, and is well known for its continuing academic and professional activities in national as well as international level since its establishment. One of the main focuses of this society is to provide platforms to the national as well as international geoscientists for sharing their research findings and establishing international networks for the advancement of research and development in the field of geosciences and engineering. Nepal Geological Society organized an international geoscientific event named “9th Nepal Geological Congress” from November 19-21 at Hotel Yak and Yeti Kathmandu, as a part of its scientific activities. The theme of this congress was “**Geoscience for Economic Prosperity and Sustainable Development**”. The theme of the congress itself is of great significance, which tries to reveal the importance of geology and its applications in the sustainable development and economic prosperity of the nations.



National Planning Commission, National Reconstruction Authority, President Chure-Terai Madesh Conservation Development Board, Department of Water Resources and Irrigation, Department of Mines and Geology, Kathmandu Metropolitan City, National Society of Earthquake Technology and Department of Geology, Tribhuvan University were the collaborating partners of this international event.

2. Inaugural Session

Chief guest Rt. Honorable Vice-President of Nepal, Nanda Bahadur Pun ‘Pasang’ inaugurated the 9th Nepal Geological Congress on 19th of November 2018 by lighting the traditional lamp in the Panas. He highlighted the importance of geosciences to minimize the disaster risk and exploration as well as mining of important mineral resources of Nepal for the economic prosperity and sustainable development of the country. Rt. Honorable Vice-President of Nepal requested the geoscientists and Nepal Geological Society to work for these important issues. Honorable member of National Planning Commission Dr. Krishna Prasad Oli explained the possibility of exploring and mining of mineral resources in Nepal providing the illustration and examples from historical books and quotes. Honorable Chief Executive Officer of National Reconstruction Authority, Mr. Sushil Gyewali explained how the geoscientists has important role in the reconstruction of the country especially after Gorkha Earthquake 2015. He quoted and agreed the view of the Co-convenor of the 9th Nepal Geological Congress Dr. Subodh Dhakal “bridging the gap between knowings and doings” as important objectives of this congress and provided best wishes to get success in this important mission. Honorable Chairman Mr. Birendra Yadav, President Chure-Terai Madesh Conservation Development Board, said that the mission of the board and the theme of the Congress are similar, and he expressed his commitment to work together with NGS in future as well. Dr. Kabi Raj Paudyal, President of Nepal Geological Society, chaired the session and welcomed all the guests and participants. Convener, Mr. Rajendra Khanal highlighted the program. Co-convenor Dr. Subodh Dhakal highlighted the technical aspects of the research papers received for the congress. Dr. Dhakal also briefed the important objectives and goal of the 9th Nepal Geological Congress. Vice-president of NGS Dr. Ganesh Tripathi provided vote of thanks. The program was conducted by NGS secretary Dr. Kamala Kant Acharya. Rt. Honorable Vice-President of Nepal Nanda Bahadur Pun ‘Pasang’ also distributed the certificates to the honorary members of Nepal Geological Society.





3. Technical Sessions

Scientific papers from 11 different countries were received but participants from 3 countries could not join physically with us due to some unavoidable situations. Total of 181 research summaries (abstracts) were received from the 11 different countries; majority of them belongs to the themes of geohazard mitigation and disaster risk management, groundwater exploration, infrastructure development, mineral and construction materials exploration. All these are related to economic prosperity of the country. Out of these, 107 papers were selected for oral presentation, and 68 were for poster presentation. These papers were presented during 3 days from November 19-21, 2018 in 3 keynote and invited talk sessions, and 14 different technical sessions. Few papers were withdrawn by the presenters and few papers were rejected due to the lack of quality standards of the congress. The themes of technical sessions and the papers presented in each of them are summarized in Table 1.

Table 1. Summary of the papers presented in each sub-themes

Session	Theme	Number of Oral Papers	Number of Poster Papers
Day 1			
Key note and Invited talk I	Structural Geology and Geohazards	2 Keynotes 2 Invited talks	-
Technical session I	Regional Geology, Stratigraphy and Tectonics	9	10
Technical session II	Chure Issues and its Conservation	4	4
Technical session III	Quaternary Geology and Soil Science, Physical Processes and Geomorphology	4	2
Technical session IV	Geoscience Education and Geo-heritage Conservation, Geo-tourism and Management	4	-
Day 2			

Key note and Invited talk II	Structural Geology, Seismic Hazard, Climate Change and Mineral Resources	2 Keynotes 3 Invited talks	-
Technical session V	Special Session on Citizen Science and Landslide Control	5	6
Technical session VI	Hydrogeology and Water Resource Management	7	6
Technical session VII	Special Session of National Reconstruction Authority	6	7
Technical session VIII	Engineering Geology for Infrastructure Development, Geotechnical Engineering	8	6
Technical session IX	Landslide and Slope Stability	3	11
Technical session X	Geological Mapping	3	-
Day 3			
Key note and Invited talk III	Mineral Resource and Water Resources Exploration and Mining, Hydropower Tunnels	2 Keynotes 3 Invited talks	-
Technical session XI	Exploration and Mining of Mineral Resources	5	-
Technical session XII	Groundwater Exploration and Contamination	7	6
Technical session XIII	Exploration and Mining of Construction Materials, Core Geology	7	1
Technical session XIV	Interdisciplinary and Miscellaneous	8	9



4. Sessions directly related to government and private collaboration agencies

4.1. Sessions related to National Planning Commission (NPC)

Out of 3 keynote and invited talk sessions, **keynote speech on “3D structure model of the Kathmandu Valley” presented by Prof. Kazuko Koketsu** from University of Tokyo Japan, and **the invited talk on “Landslide Research in the Sub-Himalaya of Nepal; Collaboration between Nepal Government and Tribhuvan University” presented by Dr. Subodh Dhakal** from Tribhuvan University, Nepal in the keynote session of the first day are very important papers for the national planning commission during planning phases. Similarly, **key note by Prof. Dr. Megh Raj Dhital** on **“Some insights into tectonic windows of Nepal Himalaya”** and invited talk on **“Glaciers and glacial lakes of Nepal in the context of climate change”** presented by **Mr. Samjwal Ratna Bajracharya** from ICIMOD in the second day have important link while making development plans. **“Sort critical note on water wealth of Nepal”** presented by **Mr. Govinda Sharma Pokhrel** and **“Role of mineral resources and mining in the economy”** presented by **Er. Ram Prasad Ghimire** as keynote in the third day are directly related to the national planning commission. In the same day, invited papers presented from Er. Uttambol Shrestha and Prof. Dr. Ram Bahadur Sah and Dr. Kabi Raj Paudyal were related to the construction materials and geological control on mineralization respectively. Actually these two papers are very useful for the planning of mineral-based industries for the prosperity of Nepal.

Talking about other technical sessions, **papers presented in technical sessions II, IV, V, VI, VII, VIII, IX, XI, XII and XIII (see Table 1)** are highly related and can provide information for National Planning Commission. The presence of **Honorable member of National Planning Commission Dr. Krishna Prasad Oli** and his important address in the inaugural session; and the presence of **Honorable member of National Planning Commission Dr. Ram Kumar Phuyal** as a chairperson of Keynote and invited talk session of Day 3 (see Table 1) has provided the evidence of how close were these sessions to the National Planning Commission.



4.2. Sessions related to National Reconstruction Authority (NRA)

Out of 3 keynote and invited talk sessions, keynote speech of the first day on **“Understanding faults and shear zones on the Himalaya”** by **Prof. Mary Hubbard** of USA and **“3D structure model of the Kathmandu Valley”** presented by **Prof. Kazuko Koketsu** from University of Tokyo, Japan are very important papers for the national reconstruction authority. Similarly, key note in the second day by **Prof. Rodolfo Carosi** on **“Constraining the evolution of HT shear zones in the Himalaya Mid Crust”** have important link and implication for national reconstruction authority.

The presence of **Honorable CEO of NRA Er. Sushil Gyewali** and his important address in the inaugural session; presence of **Honorable member of NRA, Dr. Hari Ram Parajuli** with his important address and the presence of **Honorable executive member of NRA Dr. Chandra Bahadur Shrestha** as a **chairperson of special session (session VII)** highlighted the close link of those sessions with the NRA. Talking about other technical sessions, few papers presented in **technical sessions IV, V, VIII and XIV** (see Table 1) are highly related to NRA. All the papers presented in technical session VII are related to NRA.





4.3. Sessions related to President Chure-Terai Madesh Conservation Development Board (PCTMCDB)

Out of 3 keynote and invited talk sessions, the invited talk on “**Landslide Research in the Sub-Himalaya of Nepal; Collaboration between Nepal Government and Tribhuvan University**” presented by **Dr. Subodh Dhakal** of Tribhuvan University in the keynote session of the first day is very important paper for the PCTMCDB during planning processes.

The presence of **Honorable Chairman of PCTMCDB Mr. Birendra Yadav** and his important address in the inaugural session as well as in the closing session, presence of **Honorable member of PCTMCDB Dr. Moti Rijal** and member secretary of PCTMCDB **Dr. Pem Narayan Kadel** during the special session (Session II) highlighted the close link of those sessions with the PCTMCDB. Talking about other technical sessions, few papers presented in **technical sessions III, V, XII and XIII** (see Table 1) are highly related to PCTMCDB. All the papers presented in **technical session II** are related to PCTMCDB.



4.4. Sessions related to National Society of Earthquake Technology (NSET)

Out of 3 key note and invited talk sessions, keynote speech of the first day on “**Understanding faults and shear zones on the Himalaya**” by **Prof. Mary Hubbard** of USA and “**3D structure model of the Kathmandu Valley**” presented by **Prof. Kazuko Koketsu** from University of Tokyo Japan are very important papers for the NSET.

In technical session **VIII: Engineering geology for infrastructure development, Geotechnical engineering**, the four papers were presented from the representative of NSET. The four papers presented in the second day of technical session are entitled below with the title and respective authors.

1. **Nepal, a multi-hazard risk country: spatiotemporal analysis:** **Ganesh Kumar Jimée**, Kimiro Meguro, and Amod Mani Dixit
2. **Laboratory experimental test on low strength stone masonry buildings of Nepal to understand their seismic behavior:** H. Shrestha, R. Guragain, and **R. Prajapati**
3. **Socio-technical module in assistance: promoting resilient reconstruction in wake of disaster:** **Ranjan Dhungel**, Surya Narayan Shrestha, Manish Raj Gouli, Ayush Baskota, and Bishnu Hadkhale.
4. **Urban Resilience of Nepal: A Coordinated Effort of Multiple Constituents:** **Suman Pradhan**, Surya Narayan Shrestha, Ranjan Dhungel, Manish Raj Gouli, Ayush Baskota, Nischal Parajuli, Bishnu Hadkhale, Rabindra Suwal, and Parbati Motra

Talking about other technical sessions, few papers presented in **technical sessions VII and XIV** (see **Table 1**) are highly related to NSET.



5. Role of Tribhuvan University

Role of Tribhuvan University is very crucial in this 9th Nepal Geological Congress as the scientific and academic parts of the congress were handled by the Professors from Tribhuvan University. The congress was organized by Nepal Geological Society and the responsibility of overall management of the congress was taken by the 18th Executive Committee of NGS. **President of NGS Dr. Kabi Raj Paudyal and the secretary Dr. Kamala Kant Acharya both belong to the Central Department of Geology, Tribhuvan University. All the scientific and technical aspects of the abstracts submitted to the congress were handled by Dr. Subodh Dhakal, Co-convenor of the 9th Nepal Geological Congress. He belongs to the Department of Geology, Tri-Chandra Multiple Campus of Tribhuvan University.** In addition, all the programs and presentation schedule was prepared by himself with the help of students from the Central Department of Geology and Department of Geology, Tri-Chandra Multiple Campus. Furthermore, the chief editor of the publication of the abstract volume of this congress, **Dr. Naresh Kaji Tamrakar belongs to the Central Department of Geology Tribhuvan University.**

Dr. Subodh Dhakal presented an invited talk in the first Keynote and invited talk session of the congress on 19th of November. His talk was related to the landslide research of Tribhuvan University in Chure area of Nepal in collaboration with President Chure-Terai Madesh Conservation Development Board of Nepal government. **Dr. Deepak Chamlagain**, from Tri-Chandra Multiple Campus, Tribhuvan University presented an invited talk in the second Invited talk session of the congress on 20th of November. There was also an invited talk of **Prof. Dr. Ram Bahadur Sah** and **Dr. Kabi Raj Paudyal**. Dr. Sah is retired professor from Tribhuvan University and Dr. Paudyal is a faculty member of Central Department of Geology, Tribhuvan University and is also the president of the Society. **Mr. Mukund Raj Paudel**, co-chaired the second keynote and invited talk session of the congress on 20th of November. Majority of the technical sessions were co-ordinated by Dr. Dhakal. Moreover, **technical session I was chaired by Prof. Dr. Lalu Prasad Paudel. He is the Head of the Central Department of Geology Tribhuvan University.** Technical session III was chaired and co-chaired by Dr. Danda Pani Adhikari and Dr. Ashok Sigdel respectively, both belonging to Tri-Chandra Multiple Campus, Tribhuvan University. Dr. Prem Bahadur Thapa, and Ms. Ramita Bajracharya, chaired and co-chaired respectively the technical session VIII. Dr. Suman Panthee and Mr. Narayan Gopal Ghimire co-chaired the technical session IX and XIV respectively. About 50 papers including Keynote, invited lecture and presentation on technical sessions were presented by Professors, Associate Professors, Assistant Professors and other faculty members from Tribhuvan University papers in Technical sessions I, II, VI, VIII, IX and XII (see Table 1). Key personnel of the congress including the president of NGS, secretary of NGS and the Co-convenor of the Congress were not only present in the Dias in the inaugural session, closing session and the separate meeting with the minister of Industry, Commerce and Supplies Honorable Matrika Prasad Yadav, they also delivered important speeches in these important sessions.





6. Role of Department of Mines and Geology (DMG)

Department of Mines and Geology (DMG) share a long history of collaboration with Nepal Geological Society (NGS). Several scientific as well as professional activities were accomplished in the past in close collaboration between these organizations. DMG played a vital role in the successful completion of 9th Nepal Geological Congress as a collaborating partner organization and Co-convener Mr. Ram Prasad Ghimire, Deputy Director General of DMG, made significant contribution to make the event a grand success. There are four executive members in the current 18th Executive Committee of NGS representing from DMG including Vice-President Dr. Ganesh Nath Tripathi, Acting Treasurer Mr. Lokendra Pandeya, Executive Members Mr. Narayan Adhikari and Ms. Sunu Dawadi. There were about 40 geologists actively involved in the congress in different roles as a paper and poster presenters, chair and co-chair of the technical sessions, poster session coordinator and participants. Superintendent Mining Engineer Mr. Jay Raj Ghimire, Senior Divisional Geologists Mr. Dharma Raj Khadka and Senior Divisional Geologist Mr. Kumar Khadka from DMG presented paper on different topics related to the mineral resources of the country. Senior Divisional Geologists Mr. Shiva Kumar Baskota and Mr. Narayan Baskota served the conference as a poster session coordinator. Similarly, Ms. Shova Singh, Senior Divisional Geologist, DMG, served as a co-chair of the Keynote and Invited Lecture session on the first day of the congress. Senior Divisional Geologists Ms. Monika Jha and Mr. Kumar Khadka, DMG, served as a co-chair in the parallel technical session V and XI under the title ‘Special session on Citizen Science on Landslide Control’ and ‘Exploration and mining of Mineral Resources respectively. Geologists Ms. Sunu Dawadi and Mr. Santosh Adhikari from DMG took the responsibility of rapporteurs in the Keynote and Invited Lecture Session 2 on the second day of the conference.

The third day of the congress was primarily dedicated on the mines and mineral sectors with one keynote lecture and one invited lecture focusing on the urgency of developing this sector for national prosperity. The keynote session was chaired by Honorable Member Dr. Ram Kumar Phuyal, National Planning Commission. Deputy Director General of Department of Mines and Geology and Co-convener of the conference, Mr. Ram Prasad Ghimire, presented keynote lecture on the topic “Role of mineral resources and mining in the economies of Federal Nepal: time for a new approach”. Mr. Uttam Bol Shrestha, past President of Nepal Geological Society, delivered his invited lectures highlighting the issues, challenges and opportunities in the construction material mining in Nepal. Similarly, President of Nepal Geological Society Dr. Kabi Raj Paudyal presented his invited lecture on the topic “Geological control of mineral resources in Nepal” and highlighted the importance of geology to explore the mineral potential of the country. Likewise, Mr. Govinda Sharma Pokharel, Senior Engineering Geologist, presented his keynote lecture summarizing water resource potential of Nepal on the topic “Short critical note on water wealth of Nepal”. Mr. S. C. Sunuwar, Senior Engineering Geologist, gave invited lecture on “Georisks assessment and management in hydropower development of Nepal” focusing on the importance of geological studies on the hydropower development. On the third day, parallel technical session was

conducted after the keynote session with one technical session completely dedicated to mines and mineral sector. The morning session was chaired by Mr. Krishna Prasad Kafle from Nepal and the afternoon session was chaired by Prof. Dr. A. S. M. Woobaidullah from Bangladesh. Out of fourteen technical papers, 11 papers from nepali geoscientists from the collaborating organizations and 3 from other countries, covering different aspects of mineral resources were included in this session. The presentations covered wide range of mineral resources including heavy minerals, metallic minerals, non-metallic minerals, strategic minerals, precious and semi-precious stones, construction materials among others.





7. Role of Department of Water Resources and Irrigation (DoWRI) and Engineering Geologists

Department of Water Resources and Irrigation (DoWRI) is one of the collaborating partners of the 9th Nepal Geological Congress. In different sections of the department more than 75 geologists (Life Members of the Nepal geological Society) are working in different ranks of government officers. From DoWRI there is a good representation in the 18th Executive Committee of the Nepal Geological Society (Deputy General Secretary Mr. Surendra Maharjan and Members Mr. Dev Kumar Syangbo and Mr. Bala Ram Upadhyaya). The Department which is working in surface and groundwater irrigation in different parts of Nepal and currently constructing one multipurpose project of National Pride (Bheri-Babai Diversion Multipurpose Project).

During the 9th Nepal Geological Congress more than 40 Geologist and Engineers from different units of DoWRI were actively participated. Deputy Director General of DoWRI Mr. Deepak Ghimire and Senior Under Secretary Mr. Narendra Khatri Chaired two Technical Sessions related to Groundwater and irrigation. In these two sessions 12 technical papers from Nepali and Foreign geo-scientists including geologist from DoWRI were presented. Under Secretaries Mr. Dipendra Laudari, Mr. Krishna Prasad Upadhaya, Mr. Surendra Shah and Mr. Amar Bahadur Chand Thakuri served as Technical Session co-chairs during the 9th Nepal Geological Congress. There was one presentation about the Tunnel Boring Machine (TBM) in Bheri-Babai Diversion Multipurpose Project by Mr. Ajaya Adhikari, Under Secretary of DoWRI.

Nepal Geological Society is highly indebted to all the Life Members of the Society working in different fields of Engineering Geology. Currently Engineering Geologist are working in Department of Electricity Development, Government of Nepal; Nepal Electricity Authority; NEA Engineering; different hydropower and road projects of Nepal and in different Consultancies working in the field of Engineering. Mr. Rabindra Prasad Dhakal, Engineering Geologist, working in Melamchi Water Supply Project from EPTISA is one of the Executive Members of the 18th Executive Committee.

One special technical session (V) on **Citizen Science on Landslide Control** was also conducted in 2nd day of conference. The session was chaired by Prof. Dr. Kazuki Koketsu from Japan and was co-chaired by Ms. Monika Jha from Department of Mines and Geology (DMG). Ms. Mamata Sayami Manandhar and Mr. Rabi Pangen were rapporteurs of this session. The panel discussion of session was coordinated by **Prof. Dr. Megh Raj Dhital**.

During the 9th Nepal Geological Congress, One Keynote from Senior Engineering Geologist Mr. Govinda Sharma Pokhrel and one Invited Lecture from Mr. Subash Chandra Sunuwar, Senior Engineering Geologist, were the major attractions of the congress. Besides these, more than 5 oral and more than 6 poster presentations related to hydropower and other engineering structures were presented. Engineering Geologist Mr. Tika Ram Paudel and Mr. Madan Raj Pokharel from Nepal Electricity Authority and Mr. Guru Adhikari from NEA Engineering served as Co-chair during the Technical Session. Mr. Prakriti Raj Joshi, Engineering Geologist of NEA Engineering served as the Poster session co-ordinator.



8. Closing Session

Honorable Minister for Industry, Commerce and Supplies Mr. Matrika Prasad Yadav was graciously present in the closing session of 9th Nepal Geological Congress as chief guest. Addressing the closing session, he highlighted that this congress was in right time when the government is working to fulfill the determination slogan of Rt. Honorable Prime Minister Khadga Prasad Oli “Sambriddha Nepal Sukhi Nepali”. He urged the Nepali geoscientists to support the government through their discipline especially to explore and mine the important mineral resources in the country. He also emphasized the need of country relevant technology on disaster risk reduction and management. Honorable member of National Reconstruction Authority Dr. Hari Ram Parajuli praised the Nepal Geological Society for becoming one of the best professional societies in Nepal in regularly conducting national and international scientific events in the country to foster the role of geosciences in the overall development of the country. Addressing the closing session, Honorable chairman of President Chure-Terai Madesh Conservation Development Board (PCTMCDB) Mr. Birendra Yadav repeated his commitment to work together with Nepal Geological Society to conserve the Chure area of Nepal and utilizing the natural resources of this important physiographic zone of Nepal. Giving representative speech on behalf of all the international speakers and participants, Professor Mary Hubbard of Monatna State University USA thanked the organizers and Nepal Geological Society for providing this opportunity stating that they learnt many things in this congress. She was highly delighted by the active participation and the important role played by the youths in this conference. Convener Mr. Rajendra Prasad Khanal and Co-convener Mr. Ram Prasad Ghimire presented the summary of the congress. Dr. Som Nath Sapkota, Director General of Department of Mines and Geology; and Dr. Subodh Dhakal, Co-convener of 9th Nepal Geological Congress were also present in the closing session. Vice-President of NGS Dr. Ganesh Nath Tripathi provided vote of thanks to the guest, collaborating partners and supporters. The closing session was conducted under the chairmanship of the president of Nepal Geological Society Dr. Kabi Raj Paudyal. He thanked all the committees especially the convener and co-conveners as well as all the members of Nepal Geological Society for their hard work and continuous support to make the event successful. He highlighted the necessity of recruiting geologists in Department of Roads and Army force. He added the immediate need of geological council in the country for the betterment of the geo-science profession.

Chief guest Honorable Minister of Industry, Commerce and Supplies Mr. Matrika Prasad Yadav gave token of appreciation to the Convener Mr. Rajendra Prasad Khanal, Co-convener Mr. Ram Prasad Ghimire and Co-convener Dr. Subodh Dhakal. He also honored the founders of two different scholarships Mr. Avani Mani Dixit and Mr. Jagadiswar Nath Shrestha





9. Separate meeting with Honorable Minister to discuss on the need of Geological Council

After the completion of the session, a group of senior members of Nepal Geological Society, Ex-presidents of NGS, members of 18th executives, convener Mr. Rajendra Prasad Khanal and co-conveners of 9th Nepal Geological Congress Mr. Ram Prasad Ghimire and Dr. Subodh Dhakal along with the President of NGS Dr. Kabi Raj Paudyal, Vice-President Dr. Ganesh Nath Tripathi and General Secretary Dr. Kamala Kant Acharya conducted a separate meeting with Honorable Minister of Industry, Commerce and Supplies Mr. Matrika Prasad Yadav to brief the honorable minister about the need of Geological Council in the country.

At the beginning of the meeting Dr. Kabi Raj Paudyal, President of NGS, explained the issues and need of the geological council in Nepal. Former presidents of NGS Professor Dr. Megh Raj Dhital, Dr. Amod Mani Dixit, Pratap Singh Tater, Mr. Jagadiswar Nath Shrestha, Mr. Uttambol Shrestha, Dr. Danda Pani Adhikari, Vice-President of NGS Dr. Ganesh Nath Tripathi, Secretary of NGS Dr. Kamala Kant Acharya, Co-convenor of 9th Nepal Geological Congress Dr. Subodh Dhakal and senior member of the Society Mr. Purushottam Raj Joshi briefed the honorable Minister about the reasons of the need of Geological Council in the country with the evidences, examples and illustrations. Honorable minister was positive about the issue, and he showed commitment to have further discussion and support NGS to have Geological Council in the country.

Notices of Nepal Geological Society

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Upcoming Event: EGU Galileo conference

co-organized with the

Nepal Geological Society



Perturbations of earth surface dynamics caused by extreme events

Nepal | 13-19 October, 2019



Rare or catastrophic events, such as large earthquakes, extreme storms, tsunamis, floods, wildfires, or volcanic eruptions, can have complex and long-lasting effects on Earth surface processes and biogeochemical cycles, potentially dominating system dynamics over long time scales. This conference will bring together scientists studying a range of rare/extreme events and their broader impacts on Earth surface processes, biogeochemical cycles and human systems.

Conference themes will include

- 1) the adjustment of Earth surface processes to event-driven perturbations
- 2) commonalities and differences between events of different types
- 3) feedbacks between different systems that can enhance post-event impacts
- 4) tipping points in Earth surface systems which yield into instability or irreversibility

- **Keynote talks**
- **Breakout and discussion sessions**
- **Poster sessions**

- **1.5 days field excursion, looking at multiple extreme events, including the Gorkha Earthquake, glacial lake outburst floods, and a mega-landslide**
- **3 days in the Bhote Koshi River valley at Borderlands Resort**
- **1.5 days in Kathmandu at the View Brikuti Hotel**