

## **EGU Galileo Conference:**

### **Perturbation of Earth Surface Dynamics caused by extreme events,**

**13-19 October, 2019, Nepal**

#### **EGU GALILEO CONFERENCE ACTIVITIES:**

The European Geosciences Union (EGU) Galileo Conference was jointly organized by EGU and Nepal Geological Society (NGS). The 7 days conference was conducted from 13<sup>th</sup> to 19<sup>th</sup> October, 2019 and was based on the “**Perturbation of Earth Surface Dynamics caused by extreme events**”. Total fifty numbers of foreign scientists from different country, as a member of EGU, German were participated in the conference which was organized in the Hotel View Bhrikuti, Godawari, Lalitpur, Nepal. In the very first day on 13<sup>th</sup> October, Mr Ram Prasad Ghimire, President and Dr. Kabi Raj Paudyal, Immediate Past President of NGS with the team of 19<sup>th</sup> executive member had welcomed all organizer and scientists at Hotel View Bhrikuti.

#### **INAUGURAL SESSION:**

The main program was started by 14<sup>th</sup> October, 2019 after inaugural session. Before inaugural session Dr. Christoff Andermann, the organizer of EGU had conducted the opening talk delineating the details overarching the conference and Mr. Ed Tipper has given his short keynotes on sediment composition and flux. There was a presence of about 118 Nepalese participants along with the foreign participants. Mr. Kumar Khadka, General Secretary of NGS conducted the inaugural session and delivered the welcome speech. The Chief Guest, Dr. Krishna Prasad Oli, Member National Planning Commission inaugurated the conference. Professor Dr. Ram Prasad Khatiwoda, Dean, Institute of Science and Technology, Tribhuvan University as well as Dr Ananta Prasad Gajurel as a convener, Dr. Kabi Raj Paudel, Immediate Past President, Mr. Cristoff Andermann, Professor Khum Narayan Paudyal, Head of Department of Geology, Trubhuvan University, Dr. Dan Parsons, member of EGU and Professor Dr. Niels Hovius, former member of EGU had delivered their great talk highlighting the importance of the Conference. Dr. Krishna Prasad Oli, Chief Guest of the Inaugural session has also given his concluding remarks depicting the Biodiversity, Biosphere with revolution and the process of mass extinction and showing the importance of ongoing program to solve the emerging problem and situation of Nepal Himalaya and the world. At the end of inaugural session, Mr. Ram Prasad Ghimire, President of NGS extended vote of thanks and closed the session formally.

#### **TECHNICAL SESSION**

After the inaugural session, Dr. Kabi Raj Paudyal delivered his presentation on the topic of “Geological setting and adverse geological structures for extreme events in Nepal Himalaya”. In total 19 talk programs and 9 keynotes were presented within five days (14<sup>th</sup> to 18<sup>th</sup> October) along with field visit and several discussions on “Morality of working in disaster area”, “commonalities scales of events”, “Rapid responses board and mobile unit” and poster presentation had been conducted. On 15<sup>th</sup>, the buses moved for field excursion on the route of Kathmandu-Bhotekoshi-Kodari. Bus had stopped to Giant Boulder near Balephi and Mega landslide of Jure and the discussions was made among the participants about the province of this boulder and causes and future consequences of Jure landslide. The field excursion on 16<sup>th</sup> October continued from home stay (Corridor of Bhote Koshi) to Kodari and the Chinese Border.

There were several discussions at several stops and major focus was made on damages due to the Gorkha Earthquake and Bhote Koshi GLOF.

All the session went very smoothly and timely with the help of organizer of EGU and the presenter. Immediately after the oral presentation including the key note presentation, the break times were allocated for the poster presentation every day. All the discussions were held in good environment. The deliberation was quite interesting and informative, and most of the papers were up to the international standard. The EGU has provided an ample opportunity for all the professional groups of scientists to exchange their views, share experiences and knowledge among each other dividing the participants in several groups.

At the end of the 18<sup>th</sup> October, a short session was organized to give the remarks of Organizer, Co-organizer and participants on EGU Galileo Conference. In the beginning Organizers of EGU expressed their feelings about the conference and the hospitality provided by Nepal. All of them were satisfied with the program and the support of NGS. Dr. Ananta Prasad Gajurel, and Dr. Kabi Raj Paudyal extended heartfelt thanks to the committee of EGU and all the participants and requested for the joint research collaboration in further research programs with the Department of Geology, Tribhuvan University and Nepal Geological Society in Nepal. Dr. Kabi Raj Paudyal, also requested to young international young scientists to make Nepal a research hub in future. He also delivered the notice of upcoming Himalayan Karakoram Tibet (HKT) Workshop 2021 in Pokhara, Nepal and invited to all the participants to attend the Workshop. After successful completion of the Conference, on 19<sup>th</sup> October all participants returned back to Kathmandu and concerning home countries.

Nepal Geological Society sincerely appreciates the role of Prof. Dr. Bishal Nath Upreti, Dr. Ananta Prasad Gajurel and Dr. Basanta Raj Adhikari for their role and support by linking the EGU program in Nepal in collaboration with NGS. Similarly, there is remarkable contribution of Dr. Kabi Raj Paudyal and Dr. Ganesh Nath Tripathi to carry this program in the successful end.

### **Opening Remarks by President, Nepal Geological Society**

Honorable Chief Guest, Dr. Krishna Prasad Oli Jiu

Special Guest Prof. Dr. Ram Prasad Khatiwada Jiu

Prof. Dr. Christoff Andermann, EGU

Distinguished guests, participants and delegates from European Geological Union and other Foreign Countries

Honorary Fellow Members, Former Presidents and

Members of Nepal Geological Society

Respected dignitaries from the Government of Nepal

Media personnel, ladies and gentlemen,

I on behalf of the Nepal Geological Society, and on my own behalf, feel greatly privileged and humbly honored to welcome you all to this inaugural ceremony of the Galileo Conference jointly organized by European Geological Union (EGU) and Nepal Geological Society. I welcome all the distinguished geo-scientists participating in this event from various countries.

Nepal Geological Society, established in 1980, is the umbrella organizations of all geoscientists of Nepal as well as of those working on Himalayan Geology. At present, around 1000 members of the Society include geoscientists (Geologist, hydro-geologist, engineering geologist, geotechnical engineer, environmental engineer, mining engineer) not only from Nepal but also from various countries of Asia, Europe, Americas and Australia as well.

As part of the regional and international scientific cooperation, the Society regularly organizes national and international workshops, seminars, congresses etc. Within the last 40 years, it has gradually emerged as an important regional scientific organization and we have already successfully organized almost a dozen such large international scale scientific events, notably are:

- 11th Asian Regional Conference of IAEG on Engineering Geology for Geo-disaster Management 28--30 November 2017 Kathmandu, Nepal
- Himalaya Karakoram Tibet (HKT) workshop: 9th in 1999 and 27th in 2012
- Fifth Asian Regional Conference on Engineering Geology for Major Infrastructure Development and Natural Hazards Mitigation in 2005
- International Symposium on Engineering Geology, Hydrogeology and Natural Disaster with emphasis on Asia in 1999
- International Seminar on Hydrology with Special Colloquium on Environmental Problems and Water Resources of the Himalaya in 1993

In addition, as a series of scientific activities, the Society has been regularly organizing Nepal Geological Congress since 1995 in order to bring together geo-scientists of the south and southeast Asian regions and other parts of the world to share expertise, experiences and knowledge

This EGU Galileo Conference is being organized for 7 days, from 13-19 October 2019 with the main theme “Perturbations of earth surface dynamics caused by extreme events”. In Nepal, catastrophic events, such as large earthquakes, extreme storms, floods, wildfires, or large landslides, can have complex and long-lasting effects on Earth surface processes and biogeochemical cycles, potentially dominating system dynamics over long time scales. These events may induce immediate perturbations to the Earth surface that when integrated over time may be more significant than the more frequent background processes. These events are also likely to trigger process cascades and multiple feedback loops that affect landscapes on distinct spatial and temporal scales.

This conference had been in the right time with Nepal’s perspective. Four years have already elapsed after the deadly 2015 Gorkha Earthquake, along with catastrophic outburst flood, mega landslide and annual monsoon storms in the recent years. World renowned scientists working on such topics are here to share their research findings and also their experiences in monitoring and post-event fieldwork. We do expect that this Conference would be a means for sharing our research towards the need of development, promotion and application of the Geo-scientific knowledge for the sustainable development of the nation.

The conference shall stipulate multidisciplinary discussions on the time and length scales of different types of events. We have plan to organize this conference with enlightening keynote presentations, research talks and lots of space for discussions and posters. In order to provide the ideal conditions for the topic, two days are devoted here in Kathmandu, while the other days will be to visit to the epicentral area of the 2015 Gorkha earthquake in the Bhotekoshi River valley, a region that has been buffeted by an earthquake, catastrophic outburst flood and mega landslide in the recent years.

These activities will add a brick in achieving the goals of NGS towards professional development and contribution in the task of national development. The presence of Honorable Member of National Planning Commission, Dean, Institute of Science and Technology,

Tribhuvan University today at this opening program, in spite of their busy schedule and many hurdles, is an indication that Nepal Geological Society is well recognized at the national level. We have received outstanding support from the government and academic as well as international organization. An event like this cannot happen overnight. Motivation and dedication of many Scientists, especially Prof. Christoff Andermann, EGU, Convener of the Conference Dr. Ananta Raj Gajurel, all the members of Nepal Geological Society and volunteers are noteworthy for driving this event towards a success. Once again, I extend warm welcome to you all in the inauguration ceremony of the Galileo Conference.

Thank you  
October 14, 2019

Program details and some photographs of EGU conference is shown as follows:

**6<sup>th</sup> EGU Galileo Conference**  
**Perturbations of Earth Surface Dynamics Caused by Extreme Events**

**Jointly Organized by**  
**European Geosciences Union** **Nepal Geological Society**

**13-19 October 2019**  
**Venue: Hotel View Bhrikuti**  
**Godawari, Lalitpur, Nepal**

visit **Nepal** 2020

## Glimpse of EGU Galileo Conference, 2019



Mr. Ram Prasad Ghimire, President and Dr. Kabi Raj Paudyal, Immediate Past President of NGS and Dr. Ananta Prasad Gajurel welcoming to the participants.



Photographs of Welcome program for Foreign Organizers and Scientists



## Glimpse of EGU Galileo Conference, 2019



A moment of Inauguration of the Conference



Group photo with chief guest, Dr. Krishna Prasad Oli, Member National Planning Commission

## Glimpse of EGU Galileo Conference, 2019



Dr. Krishna Prasad Oli, Member of NPC delivering his great talk



Mr. Cristoff Andermann, presenting the overall conference plans and its background.



## Glimpses of EGU Galileo Conference, 2019



Nepalese and Foreign participants including young generation attending inaugural session of conference



## Glimpse of EGU Galileo Conference, 2019



Chief Guest with other guest in inaugural session



Poster presentation and discussion



## Glimpse of EGU Galileo Conference, 2019



Photographs of field excursion during the Conference.



## Glimpse of EGU Galileo Conference, 2019



Photographs of field visit during Conference