

**Report on the 9th International Conference on Geomorphology
and post-conference Intensive Course for Young Geomorphologists**

Sujay Bandyopadhyay

Department of Geography, The University of Burdwan, West Bengal, India, sujaybandyopadhyayest@gmail.com



'Time flies when you are having a good time': this is probably the best way to summarize in a sentence of the participation in the **9th International Conference on Geomorphology (ICG)** and the follow-up International Association of Geomorphologists (IAG/AIG) - European Geosciences Union (EGU) intensive field course on 'Geomorphology field training in tectonically active mountain regions'. As the participation in the 9th ICG and IAG-EGU field was a great experience for me, both scientifically and socially.

9th International Conference on Geomorphology (ICG)

The 9th ICG, organized by the Indian Institute of Geomorphologists (IGI) was held in New Delhi at Vigyan Bhawan from 6 to 11 November, 2017 and the main theme of this conference was 'Geomorphology and Society'. The Conference emphasized on the global impact of Geomorphological research and highlighted the interdisciplinary and multinational efforts in research and communication of results to the society. Around 477 delegates from 44 countries, including 172 from India, gathered in this conference for presenting their research findings as oral and poster presentations in 36 technical sessions. The opening ceremony took place in the Plenary Hall of the venue on Monday, 6th November, 2017 at 16:00 hours. This was followed by the first General Assembly of IAG/AIG on the next day (Tuesday, 7th November, 2017) at 08:30 hours during which 23 Young Geomorphologists "Grant Holders" were introduced to the international geomorphological community. The IAG/AIG Honorary Fellowship (highest honour that IAG/AIG can bestow) for outstanding research in Geomorphology were also presented in this assembly. The key note speech on 'Geomorphology and Society' by Prof. Michael Crozier (University of Wellington, New Zealand) was very informative. I have tried to listen to the presentations of technical sessions as many as possible and found that they were all very insightful. Especially, the seven plenary lectures were without exception outstanding in content and presentation and was a real highlight of the conference. The plenary speakers were Prof. Takashi Oguchi (Japan), Prof. Morgan De Dapper (Belgium), Prof. Francisco Gutierrez (Spain), Prof. Gerald C. Nanson

(Australia), Prof. Savindra Singh (India), Prof. Avijit Gupta (Australia) and Prof. Irasema Alcántara Ayala (Mexico). I really learned a lot from Nanson's talk on 'Equilibrium theory, evolution and least action principle; factors determining self-adjustment in geomorphology and Earth's fluvial stratigraphic record'. I was deeply impressed by attending the session 'Earth Surface Processes and Landforms (ESPL) - for Young Geomorphologists - How to write Scientific Paper' where Prof. Stuart Lane (UK) spoke on improving writing skills to explain good science. In addition, through presenting my own work I was able to obtain invaluable feedback from various researchers in this area. I had my oral presentation on 'Luminescence Dates from Lower Gangetic Plain, India and its Implications for Quaternary Evolution of the Western Bengal Basin-Fill' in the technical session (S12) of 'Palaeohydrology and Fluvial Archives - hydrological extreme and critical events (HEX)' (Fig. 1a). I found quite impressive numbers of renowned Geomorphologists as well as promising scholars attending that session. After my presentation I received two questions from the audience, (i) related to the dating of calcretes which I had shown in the stratigraphic log, and (ii) about the number of OSL ages. In addition to the scientific goal, it is important during conferences to know each other personally in order to work in collaboration. I had great discussions and established academic contacts with several young researchers who are working in similar field in different parts of the globe, shared my research interest and academic experiences with Prof. Ashok Kumar Singhvi (India) and Prof. Peter van der Beek (France).

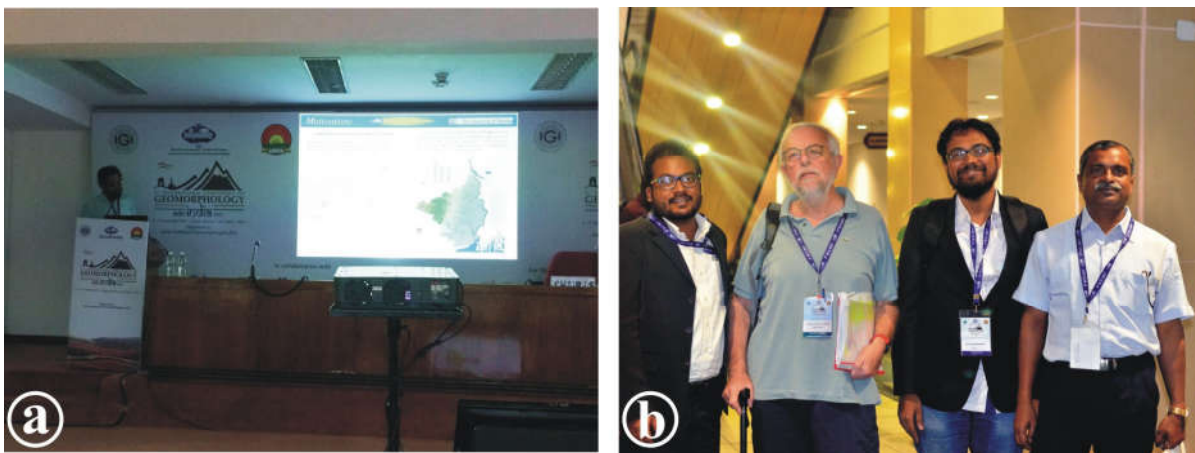


Figure 1. Pictures during the 9th ICG New Delhi at Vigyan Bhawan. (a) I myself presented 15-minutes oral paper during the technical session. (b) Prof. Sunil Kumar De (Conference Convener), Prof. Morgan De Dapper (Treasurer, IAG/AIG Executive Committee) and IAG grant-holders (from left: Sayantan Das and Sujay Bandyopadhyay) at Vigyan Bhawan.

Finally, it was indeed a successful conference and was extremely well organized; Thanks to Prof. Sunil Kumar De. I felt very proud and honored to be an IAG-Grant holder and a participant of the International Conference of paramount standard; it has opened altogether a new era in my academic life. Having interacted face-to-face with many renowned geomorphologists, such as Olav Slaymaker, Gerald Nanson, Avijit Gupta, Piotr Migon, Paul Carling was truly an honour of lifetime. For all of these, I would like to express my gratitude to the Selection Committee of the IAG for considering my candidature for the IAG-Grant Awardee which helped me to participate in this prestigious event. In this context, I also would like to extend my sincere thanks to Prof. Mauro

Soldati, Dr. Marta Della Seta and Prof. Morgan De Dapper for their enormous efforts (Fig. 1b). In spite of all, from my perspective, it would have been more helpful if there were less number of concurrent sessions and the time of questions/comments/discussion during presentation was more.

IAG-EGU Intensive Course for Young Geomorphologists

Apart from the conference, the IAG-EGU Field Intensive Course in Himalaya from 12 to 16 November, 2017 was very exciting. Encountering the lofty ranges of Himalaya, visiting Dehradun, Mussoorie, Paonta Sahib and Sataun was undeniably a mind-opening experience for most of the young geomorphologists (Fig. 2a). The program consisted of evening discussions, one-day lecture session and two days field trip. The evening session of the first day at *Hotel Treebo Ajanta Continental* in Dehradun was about the self introduction and briefing for field training. The participants were provided with well-prepared field guidebook which was very useful as it included the short description of each stop along with a colored map, photographs and other major features. I especially like meetings beginning in the evening around a dinner table, because in my opinion this is the best way to meet and get in touch with new people blended in a friendly atmosphere over whole duration of the program. The second day lecture session was again very interesting and brainstorming that provoked discussion about the geomorphic response to active tectonic deformations and climate at different space and time scales (Fig. 2b). Lectures, especially delivered by Prof. Peter van der Beek (France), Prof. Mauro Soldati (Italy) and Prof. Vishwas S. Kale (India) were enlightening. As far as field visits are concerned, last lecture delivered by Dr. George Phillip of Wadia Institute of Himalayan Geology (WIHG) was most useful for second day visit. However, it would have been more interesting if there was a lecture on general geology and tectonic set-up of Himalayan fold-thrust belt for those who were new in this area.

The field sessions were undertaken in and around Dehradun region of Lesser and Siwalik Himalaya to understand the active tectonics of a developing orogen. The first day field traverses from Dehradun to Mussoorie was interesting, under the supervision of Dr. P.K. Champati Ray (Indian Institute of Remote Sensing). The day provided a precious overview of Doon gravels and Siwalik deposits near vicinity of Main Boundary Thrust (MBT), Lesser Himalayan sequence (Fig. 2c) and occurrence of landslides (Fig. 2d) along the Dehradun-Mussoorie road. The permanent GPS station in this area to monitor geodynamic deformations was also explained to us. On the same day, we were also enriched by the knowledge and experience shared by Prof. Beek. The next day field trip consisted a traverse towards Paonta Sahib and Sataun after crossing Dun gravels with multiple stops and systematic description of sites. At Giri River near Sataun Bridge, the description about landslides and the river terraces was given by Dr. Phillips. There were also terrace offsetting (Fig. 2e) and sag pond (Fig. 2f) observed by us which were clear topographic expressions of active tectonics.

With all the mesmerizing memories, I have to admit that the conference and intensive course participation in many respects was a fruitful experience, both scientifically and socially. Particularly, I have been benefited greatly from the intensive exchange of views and ideas with other young Ph.D.-students being in their early stages of doctoral research and struggling with similar problems in their academic life alike me. I enjoyed, learnt and liked every moment of the

visit. I was thrilled to learn about my selection for this honour and I deeply appreciate the generous support. Special thanks are due to the Thomas Cook's team for efficiently managing these events. Lastly, based on my experience, I would like to encourage all the early career researchers (ECR) to apply for such grants of IAG for attending future IAG programme.



Figure 2. Pictures of discussion session and field trips in intensive field course. (a) Photo-session of the Young Geomorphologists in front of the Hotel. (b) Interactions among experts and some participants during lecture session. (c) Blaini formation exposed along Dehradun-Mussoorie section. (d) Frequent landslide zone around Mussoorie, Lesser Himalaya. (e) Terraces along the Giri River (tributary of the Yamuna River) enroute Sataun. (f) Sag pond located 1 km southeast of Bharli is a clear geomorphic indicator of strike-slip movement along the Bharli fault.