## **International Conference**

on

Mountain Ecosystems: Biodiversity and Adaptations Under Climate Change Scenario (MBCC-2023)

## (22-24 March 2023)



Jointly organized by

Graphic Era Deemed to be University, Dehradun 248002, Uttarakhand, INDIA

&

International Centre for Integrated Mountain Development, Kathmandu, NEPAL

Venue



Graphic Era (Deemed to be University), Dehradun 248002 Uttarakhand, INDIA

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# **Advisory Committees**

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Dr Edgardo Donati, CINDEFI-Argentina

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Prof Ali Boularbah, Cadi Ayyad University, Morrocco

## About the Conference/Thematic areas

Mountains occur in all the continents, in all the latitude zones, and within all the world's principal biome types. Mountain ecosystems have ecological, aesthetic, and socioeconomic significance, not only for people living in the mountains, but also for those living beyond—especially those in the lowlands who benefit from the ecosystem services mountains provide. Mountains represent unique areas for detecting climate change and assessing climate change impacts. There is an increasing awareness on climate change impacts the mountains, mountain ecosystems, species and mountain people. The extreme colder environments of mountains possess several climatic factors that generate stress for life, such as, low temperature, high exposure to radiation, low nutrient and water availability, desiccation, etc. These biotic and abiotic factors influence both structural and functional characteristics in the biological communities (animals, plants, and microbes).

The mountain ecosystems and the mountain communities have received attention during international debates such as the United Nations Conference on Environment and Development in Rio de Janeiro in 1992, the Sendai Framework for Disaster Risk Reduction 2015, the Paris Agreement 2015 of the United Nations Framework Convention on Climate Change, and the Sustainable Development Goals (SDGs) and Targets 2030. Importance of resilience and adaptations acquired by the mountain biodiversity to cope up in harsh climatic conditions has been realized in these forums.

In this International Conference, the efforts will be on bringing together the distinguished groups of researchers who have been working on various aspects of mountain biodiversity across disciplinary and geographical boundaries. The conference will focus on the presentations on biodiversity (animals, plants, microbes) with particular reference to their cope up mechanisms in low temperature environment of mountain ecosystems in general and Himalaya and Antarctica in particular.

Himalaya includes the highest and the youngest mountains with more than 110 peaks rising to elevations of 24,00 feet asl. The Himalayan region, often referred as the "Water Towers of Asia", assumes sacred with special significance being young and dynamic on one hand, and the most complex and diverse on the other, ranging from the wettest to driest areas. The region has been recognized amongst the 36 global biodiversity hotspots. The region has a discrete geographic and ecological entity that produces a distinctive climate of its own and influences the climate of much of Asia.

Antarctica represents the coldest part of the Earth, rendering it a unique system and highly attractive for research projects focusing on biodiversity, life strategies, and adaptation mechanisms. Antarctica, based on the climatic conditions, has been classified into three biogeographic zones- sub, maritime, and continental Antarctica. Threats to Antarctic ecosystems and biodiversity are facing threats mainly due to the climate change, biological invasions, pollution and the anthropological activities.

## **Purpose of the Conference**

- To provide an opportunity to the researchers on the proposed subject line working globally through sharing their experience and knowledge.
- Formation of a network of the experts on the proposed research areas across the mountain ecosystems.

## Thematic areas

- Biodiversity (animals, plants, and microbes) with particular reference to mountain ecosystems
- Adaptations (morphological, biochemical, and genetic)
- Socio-ecological adaptations
- Ecosystem services in climate change perspective
- Ecosystem restoration and nature based solutions

### **The Partners**

#### Graphic Era Deemed to be University, Dehradun, India

Graphic Era Deemed to be University holds the reputation of being in globally recognised, top ranked world Universities. In 2008, the Institute was accorded the status of Deemed University under Section 3 of the UGC Act, 1956 vide Notification F.9-48/2007-U.3 (A) dated August 14, 2008 and approved by the Ministry of Human Resource Development, Government of India. In 2015, Graphic Era University was accredited by NAAC with grade 'A', and in 2022 it was reviewed and accredited with grade 'A+'. In July 2022, the University was conferred All-India Rank 64 in the Engineering Category, All India Rank 65 in Management Category, and All India Rank 74 in the University Category in the MHRD NIRF (National Institutional Ranking Framework) Rankings and retained its position consecutively for the third year amongst top 100 Universities of India.According to Times Higher Education rankings of 2022-23,Graphic Era University is in rank band 601-800 in The world class Universities 2023 and in India, it in Top 10 Universities. Further, the University is the Flagship University in Uttarakhand region with the landmark accomplishment of being the only University to have 6 NBA Accredited Engineering Programs which includes Computer Science & Engineering, Biotechnology, Civil Engineering, Electronics & Communications Engineering, Mechanical Engineering and Electrical Engineering.

The University offers courses and projects in the area of Biological Sciences including, Biotechnology and Bioinformatics, Life Sciences, Microbiology, Food Technology, Environmental Science, Agricultural Science, etc. It has recently introduced a new course "Himalayan Biodiversity" at B Tech level. The University, in last few years, has initiated in-house as well as externally funded projects with particular reference to Biodiversity (propagation and conservation, active ingredients), Water management (Technology intervention), and Foods of Himalaya (fermented foods, in particular).

### International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal

The International Centre for Integrated Mountain Development (ICIMOD), is a regional knowledge development and learning center serving the eight regional member countries of the Hindu Kush Himalaya – Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan – and based in Kathmandu, Nepal. Globalisation and climate change have an increasing influence on the stability of fragile mountain ecosystems and the livelihoods of mountain people.

ICIMOD aims to assist mountain people to understand these changes, adapt to them, and make the most of new opportunities, while addressing upstream-downstream issues. We support regional transboundary programmes through partnership with regional partner institutions, facilitate the exchange of experience, and serve as a regional knowledge hub. We strengthen networking among regional and global centres of excellence. Overall, we are working to develop an economically and environmentally sound mountain ecosystem to improve the living standards of mountain populations and to sustain vital ecosystem services for the billions of people living downstream – now, and for the future.

## **Invited Speakers**

- 1. Dr Eklabya Sharma, ATREE, Bengaluru, India
- 2. Dr Sanjay Kumar, CSIR-IHBT, Palampur, India
- 3. Prof (Dr) Edgardo Donati, Universidad Nacional de la Plata, Argentina
- 4. Dr Avinash Sharma, NCCS Pune, India
- 5. Dr SS Samant, India
- 6. Dr Sergio Levia Poveda, Universidad Austral de Chile, Chile
- 7. Dr Vineet Jishtu, HFRI, Shimla, India
- 8. Dr Shreekar Pant, BGSB University, Rajouri, India
- 9. Prof (Dr) R.C. Sundriyal, HNB Garhwal University, Srinagar, India
- 10. Prof (Dr) Rajesh Sani, Biology, and Health Sciences, South Dakota, USA
- 11. Dr Ramesh Krishnamurthy, WII, Dehradun, India
- 12. Dr Luis Andrés Yarzábal, Universidad Católica de Cuenca Cuenca, Ecuador
- 13. Prof Shachi Shah, IGNOU, New Delhi, India
- 14. Dr Ruchi Badola, WII, Dehradun, India
- 15. Dr Rajesh Joshi, GBP-NIHE, Sikkim, India
- 16. Dr Urbieta María Sofía, Universidad Nacional de la Plata, Argentina
- 17. Prof SR Joshi, NEHU, Shillong, India
- 18. Prof Agnieszka Kalwasińska, Nicolaus Copernicus University in Toruń
- 19. Prof (Dr) JyotiVakhlu, University of Jammu, Jammu, India
- 20. Prof (Dr) RK Maikhuri, HNB Garhwal University, Srinagar, India
- 21. Prof (Dr) Naveen K Navani, IIT, Roorkee, India
- 22. Prof (Dr) Nehal AFarooquee, IGNOU, New Delhi, India
- 23. Dr AchleshDaverey, Doon University, Dehradun, India
- 24. Dr Silvia Batista, Instituto de Investigaciones Biológicas Clemente Estable Montevideo, Uruguay

#### International Conference

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## **Registration Form**

Seminar is open to all involved in R&D, teaching, consultancy, planning etc., in the area of Conference themes. Interested participants are invited to contribute their papers for oral or poster presentation. Abstracts should be prepared (about 250 words) using MS-Word and sent to the Organizing Secretary (E mail: <u>MIBCC2023@geu.ac.in</u>) as file attachment before **15 January 2023.** The name of presenting author should be asterisked.

Language: English

Name of the Participant	
Designation	
Institution and Address	
Mobile	
Email	
Type of presentation (Invited/Oral/Poster)	
Payment Details	
Account name/Beneficiary name	Graphic Era (Deemed to be University)
	A/C Research & Development
Bank Account Number	919010071768467
Bank Address	Axis Bank, Saharanpur Road, Dehradun
IFSC Code	UTIB0002959
MICR Code	248211006
Branch code	002959

Souvenir: The abstracts of the Conference will be published in form of a souvenir. Selected Abstracts will be considered for publication in relevant **Scopus** or **SCI indexed Journals**.

Registration Fee: Indian Nationals: Faculty Rs 6500/-Post Doc/PhD Scholars/Students Rs 5000/-Foreign Nationals: Faculty: US \$ 100 Post Doc/PhD Scholars/Students : US \$ 75 Important Dates December 31, 2022: Deadline for registration January 15, 2023: Deadline for abstract submission

The complete form may be mailed <u>MBCC2023@geu.ac.in</u>

# Contact



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