

Report on the Event
**36th IGI National Conference of the Indian Institute of Geomorphologists (IGI) on
Geomorphology, Environment and Society
January 11–13, 2025**
Organized by:
Department of Geography • Maharshi Dayanand University • Rohtak-124001

The Department of Geography, Maharshi Dayanand University Rohtak, organized the 36th IGI National Conference collaboration with the Indian Institute of Geomorphologists (IGI) on the theme **Geomorphology, Environment and Society** during January 11–13, 2025. The conference theme, *Geomorphology, Environment, and Society* reflects the interdisciplinary nature of the event, which aimed to explore the interactions between geomorphological processes, environmental changes, and societal impacts. The conference was structured into multiple sessions over three days, featuring keynote addresses, panel discussions, and technical sessions with a focus on recent advances in geomorphology, structural geomorphology, geomorphology & climate change, changing geo-environment & landscape dynamics, Geomorphosites & geo-tourism, geo-hazards & management, geomorphology and development & resource management and geomorphological mapping & anthropogenic landform changes and applied geomorphology.

Day 1: January 11, 2025

The first day began with the registration of delegates, followed by the **Inaugural Session** at the Faculty Development Centre in which **Prof. Rajbir Singh**, Vice Chancellor of Maharshi Dayanand University, was the chief guest. **Prof. Sunil Kumar De** delivered the **Presidential Address** during the inaugural session on the theme **Relevance of Geomorphology in Environment and Society**. This set the tone for the conference, emphasizing the critical role of geomorphology in understanding environmental changes and their societal implications. The session was followed by the **Prof. S.R. Basu Memorial Lectures**, where **Prof. Ramkrishna Maiti** discussed **River Research: Philosophical Imperatives & Methodological Priorities**, highlighting the importance of river systems in geomorphological studies. This session was chaired by Prof. Sunando Bandyopadhyay.

After lunch, a **Plenary Session** was held and it was chaired by Prof. Asish Kumar Paul and co-chaired by Prof. A.R. Siddiqui. The Plenary Session featured three key speakers:

1. **Prof. Milap Chand Sharma** spoke on the *Palaeo Extent of the Himalayan Glacier*, providing insights into the historical changes in glacier dynamics and their implications for climate change.
2. **Prof. Sunando Bandyopadhyay** presented on *Water Bodies of the Kolkata Municipal Area: 200 Years of Change*, focusing on the transformation of urban water bodies and their environmental impacts.
3. **Dr. Pratap C Moharana** discussed the Anthropogenic Transformation of Sand Dune Topography and its Impact on Aeolian Desertification in Rajasthan, highlighting human-induced changes in arid landscapes.

To promote research among young scholars, a **Young Geomorphologist's Competition** was organized, where five researchers participated. These young scholars presented their research findings on emerging areas, such as fluvial behaviour, climate change impacts on landslides, coastal geomorphology, glacier dynamics and the impact of landfill sites on urban landscape. Sri Pritam Kumar Santara was adjudged the best presenter. In the evening, all the delegates visited the newly established *Geogalleria* in the Department of Geography. The Geogalleria showcases both the old and modern concepts of geography. The day concluded with a **Cultural Evening** and dinner, fostering networking among participants.

Day 2: January 12, 2025

During the day, a total of 16 technical sessions were organized at four different venues, with each having a chairperson, co-chair and rapporteur. Eighty-eight research papers were presented in these technical sessions, and five keynote speakers delivered their lectures on different sub-themes of the conference.

In the evening, IGI General Board Meeting was held at the Faculty Development Centre.

Day 3: January 13, 2025

On the last day, two technical sessions were held at venues 1 and 2. A total of five research papers were presented in these sessions.

The conference concluded with a **Valedictory Session**, summarizing the key findings and future directions for geomorphological research.

Key Themes and Takeaways

1. **Interdisciplinary Approach:** The conference underscored the critical importance of integrating geomorphology with other disciplines such as environmental science, sociology, urban planning and geography to address complex and multifaceted issues like climate change, rapid urbanization, and disaster management. The interdisciplinary nature of the event facilitated a holistic understanding of how geomorphological processes interact with environmental and societal factors. This interdisciplinary approach not only enriches the field of geomorphology but also enhances its practical applications in solving real-world problems.
2. **Climate Change and Geo-Hazards:** A significant portion of the conference was dedicated to exploring the impacts of climate change on geomorphological processes and landscapes. Presentations highlighted the alarming rate of glacier retreat in the Himalayas, the increasing frequency of floods, and the heightened risk of landslides in vulnerable regions. These discussions emphasized the urgent need for adaptive management strategies to mitigate the adverse effects of climate change. For example, researchers presented case studies on how communities in flood-prone areas are adopting new technologies and practices to reduce their vulnerability. The conference also stressed the importance of long-term monitoring and predictive modelling to better understand and respond to geo-hazards. By focusing on the intersection of climate change and geomorphology, the conference provided valuable insights into how societies can better prepare for and adapt to these evolving challenges.

3. **Applied Geomorphology:** The conference showcased the practical applications of geomorphology in various fields, including resource management, urban planning, and disaster mitigation. The conference also highlighted the importance of geomorphology in disaster mitigation, with several presentations focusing on strategies to reduce the impact of landslides, floods, and earthquakes. These practical applications underscored the relevance of geomorphology in addressing contemporary societal challenges and promoting sustainable development.
4. **Emerging Research:** The Young Geomorphologist's Competition was a highlight of the conference, showcasing innovative research from the next generation of geomorphologists. Young researchers presented their work on a wide range of topics, including landslides, coastal geomorphology, glacier dynamics and the impact of landfill sites on urban landscapes.

Conclusions

In conclusion, the 36th IGI National Conference brought together 137 registered delegates and 100 postgraduate geography students and 75 Ph.D. scholars and faculty members from different departments to discuss advancements in geomorphology. It emphasized an interdisciplinary approach, exploring geomorphological processes, environmental changes, and societal impacts. Key topics included climate change, geo-hazards, and applied geomorphology in resource management, urban planning, and disaster mitigation. The conference highlighted geomorphology's vital role in sustainability and provided insights on leveraging it to tackle pressing environmental and societal challenges.