About WIHG

Established in 1968, the Wadia Institute of Himalayan Geology (WIHG) is an autonomous institute of the Department of Science & Technology (DST), Government of India, and a premier institute for Himalayan Geosciences. Using well-equipped, state-of-the-art laboratories and sophisticated instruments, the institute's research mandate is to address fundamental questions and push the frontiers of our understanding on topics such as seismogenesis, geodynamic processes, paleoclimate, climate-tectonic interactions, the evolution and extinction of life, ore formation, glacio-river systems, natural hazards (landslides, floods, and earthquakes), and anthropogenic impact. In the era of global climate change, natural hazards and anthropogenic impact, the sustainable development of the Himalaya and adjoining regions is a critical challenge, and the 9th NGRSM addresses it through "RISE: Resilient Innovations for Sustainable Earth."

About the city

Dehradun is the capital of Uttarakhand and one of India's oldest cities. It is a hub for national institutions like the Forest Research Institute, Indian Military Academy, etc. The cities' serene atmosphere also makes it a popular tourist destination, offering easy access to attractions such as Mussoorie, Dhanaulti, and Rajaji National Park.

Geology of the city

Dehradun city is a synformal depression located in the Doon valley within the Sub-Himalaya. Structurally an inter-montane valley bordered by the Mussoorie range to the north and the Mohand anticline to the south. The Siwalik group in the region had a rich history of many exquisite and now extinct flora & fauna and also hosting the Cenozoic sedimentary formations and structures that chronicle the story of mountain building.

Travel

Dehradun is well-connected with major cities by air, train, and road. Jolly Grant Airport is the nearest, 20 km away from Dehradun City. One could travel either by Bus or Train is well-connected to major north Indian cities, particularly New Delhi. Luxury buses like Volvo, buses with berths etc. are available from ISBT, Dehradun to other nearest cities like Chandigarh, Shimla etc.

Weather

November in Dehradun is when autumn ends and winter begins, with temperatures typically between 10°C and 24°C. The days are cool, with mild afternoons and clear mornings and evenings. Be sure to pack appropriate warm clothing for your visit.

Institute Advisory Committee

Dr. Barun K. Mukherjee Dr. Gautam Rawat Dr. Jayendra Singh Dr. Ramesh K. Sengal

Contacts

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वाडिया हिमालय भू-विज्ञान संस्थान

NG 9th SM

National Geo-Research Scholars Meet

RISE: Resilient Innovations for Sustainable Earth

(Come, Connect and Collaborate-at the heart of Himalayan Geology)

12-14 November 2025



Organized by

Wadia Institute of Himalayan Geology

(An Autonomous Institute of Department of Science & Technology (DST). Govt. of India)

Dehradun

National Advisory Committee



Prof. Abhay Karandikar, Secretary, DST, Gol Prof. Shailesh Nayak, Chairman G.B., WIHG Prof. Sunil Bajpai, Chairman RAC, WIHG Dr. Vineet K. Gahalaut, Director, WIHG





Abstract accptance

Call for abstracts & Registration: 5 Sep. 2025

Deadline abstract submission : 5th Oct. 2025

Organizing Secretades

Dr. Prakasam M. Dr. Anil Kumar Dr. Rajesh S. Dr. Chhavi Pandey Dr. Paramjeet Singh

: 20th Oct. 2025



ngrsm2025@gmail.c

<u>Venue</u>

Wadia Institute of Himalayan Geology 33, G. M. S. Road Dehradun - 248001 (Uttarakhand) The Wadia institute of Himalayan Geology (WIHG) has hosted every year its flag-ship programme the National Geo Research Scholars Meet (NGRSM), since 2016. It provides a scholarly platform for budding researchers to showcase their work, share new ideas, effective science communication and receive feed-backs from peer groups. This august event also offers unique opportunity for students and researchers to familiarise state-of-the-art instruments in WIHG, establish peer networking with renowned experts and also keep abreast the latest technological developments in Geosciences. The theme of the 09th NGRSM-2025 is "RISE: Resilient Innovations for Sustainable Earth," which will cover the following specific sessions:

Technical sessions



Session Conveners: Drs Paramjeet Singh, Mutum Rajanikanta Singh, Kunda Badhe Geodynamic processes and deep Earth study



The study of geodynamic processes in nature and deep inside the Earth is challenging yet crucial to understand the Earth's structure, plate tectonics, mantle dynamics, orogeny, rheology, metamorphism, volcanic activity and metallogeny, endured for millions of years. We encourage session contributions from igneous and metamorphic petrology, geochemistry, geochronology, exhumation and structural geology to elucidate the deep interior of Earth and how it interacts with the surface over space and time.

Session Conveners: Drs Anil Kumar, Som Dutt, Chhavi Pant Pandey



Quaternary geology: climate and tectonics

The Earth's landscape evolves through the complex and dynamic interaction between surface processes such as erosion, weathering, sedimentation, and subsurface processes like tectonic uplift and faulting. This theme invites contributions from researchers working to decipher climate change in the Past, Present and Future using terrestrial archives (rivers, lakes, caves, tree-rings, etc.), observational records, and modelling, and the role of climate along with tectonic forces in landscape building in the Himalaya during the Quaternary period.

Session 03

Session Conveners: Drs Prakasam M., Subhojit Saha, Ningthoujam Premjit Singh Sedimentary horizons and past life

This theme emphasizes the importance of interdisciplinary research combining sedimentology and paleontology to better understand Earth's history. The dynamic interactions between Earth's physical processes and biological evolution will be discussed in detail through oral and poster presentations. Additionally, this session aims to uncover how sedimentary rocks and fossils provide vital information about environmental changes, evolutionary patterns, and significant historical shifts, utilizing classical methods and advanced instruments.



Session Conveners: Drs Swapnamita Vaideswaran, Suman Lata Srivastava, Pramod Rajak

Environmental geology, natural resources, hazards, and mitigation

This theme will cover developments in mineral discoveries, provenance and utilization of economic ores, fossil fuels, water and other natural reserves, highlighting breakthroughs in exploration of sustainable energies. Geohazards have a direct consequence on environment, lives and economy. Sessions on mapping, modeling, risk management, early-warning of hydrological, meteorological, lithospheric hazards like landslides, avalanches, floods, earthquakes, volcanoes, tsunamis, forest fires and other natural and anthropogenic hazards are to be featured.



Session Conveners: Drs Rajesh S., Parveen Saini, Mahesh Ramrao Kapawar

Advances in seismo-tectonics, sub-surface imaging and crustal deformation

This theme invites researchers to present their findings, ideas and approach towards research problems on diverse aspects of earth's surface and sub-surface processes through the integration of different geophysical, geological and computational methods. We welcome contributions from researchers who work on earthquake processes, seismo-tectonics, sub-surface imaging of earth's internal structures, crustal deformation and paleomagnetism. The theme would provide a platform to discuss existing knowledge, identifying new frontiers and facilitate integration of results from different streams towards the development of new or reframed seismo-tectonic and deformation models in general, and also in Himalaya.



Session Conveners: Drs Rakesh Bhambri, Rouf Ahmad Shah, Tariq Anwar Ansari

Cryosphere, geohydrology and geoengineering

The session will mainly focus on the Himalayan cryosphere-status, hazards and mitigation strategies; glacier dynamics, snow-ice hydrology and mountain meteorology; fluvial & groundwater dynamics-water security, challenges and vulnerability; terrestrial water resource protection- contaminants, source tracking and health risks; geological engineering- advances for sustainable development; slope stability- modelling and simulation techniques, and experimental research in geological engineering.

Session Conveners: Drs Saurabh Singhal, Jitender Kumar, Narendra Kumar



Analytical tools and techniques in geosciences

Welcome to the session on "Analytical Tools and Techniques in Geosciences". As the complexity of Earth systems continues to challenge young minds, advanced analytical methods—ranging from geochemical and geophysical analyses to remote sensing, GIS, and AI/ML—are essential for gaining deeper insights. By combining traditional approaches with modern technologies, these tools enhance our understanding of Earth's processes. We invite you to explore how these tools are applied across various disciplines of Earth Sciences.

Session Conveners: Drs Sudipta Sarkar, Vandana

Session 08

Workshop and Hands-on Training

This session invites participants to learn the modern geoscience survey techniques, use of opensource tools and its accessibility, laboratory techniques and hands-on training from the WIHG experts.

Geological Field Trips (14th November, 2025)

Explore the Himalayan foothills with a 1-day field trip which will offer exciting insights into the frontal part of the Himalaya. Participants will observe the youngest geological formations of the Siwalik and their active tectonics, gaining a deeper understanding of the region's fold and thrust belt. A fantastic opportunity for geologists and students.

Registration and selection criteria

Registration for this conference is complimentary. We invite applications from enthusiastic young researchers (PhD candidates and Postdoctoral fellows) engaged in any field of Geosciences. Please register and submit abstract(s) using the provided Google form*. Preference will be given to submissions containing innovative and unpublished research. Participation is limited to 150 individuals, and applications will be selected based on scientific merit. Eligibility for travel allowance and certificate requires 100% attendance of the selected participants.

Call for abstracts/important dates

Abstract submissions for NGRSM-2025, accessible via the conference website/Google Form* starting first week of September 2025, are invited. Presenting authors either deliver an oral or a poster presentation, while co-authorship on multiple abstracts is welcome. Please adhere strictly to the guidelines and format available on the 09th NGRSM 'Google Form' as per the template.

Call for the abstracts and Registration opens: 5th September 2025 *Link: https://forms.gle/xtzx32V2y44uefw16

Abstract submission deadline: 5th October 2025 Abstract acceptance notification: 20th October 2025

Content responsibility

Authors are responsible for the scientific quality and content of their abstracts. NGRSM reserves the right to reject abstracts if they:

• are not in English; are outside the NGRSM scope; lack basic scientific merit

Presentation instructions

PPT Guidelines

 PowerPoint slides need to be compatible with Windows; Clearly presentable in ten minutes or less.

Poster Guidelines

- Poster format is A0 portrait (841 mm height x 1189 mm length)
- Posters will be displayed in the outdoor of WIHG-Auditorium. Presenters must bring printed posters with them
- All poster presenters may have a 2 min lightning talk about their poster (in front of the poster without presentation slides).