

ANNUAL REPORT 2021-22

- Name of the Department - Geology
- Major Activities and Achievements –

1. Student Council Elections (2021-22)

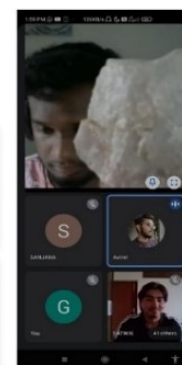
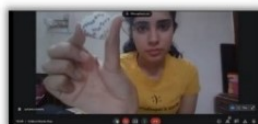
The new academic year was amidst the challenges due to wide spread COVID 19. An online election was conducted on **August 12, 2021** to the post of President, Vice president, Secretary and two joint secretaries. A new team of six office bearers under the leadership of Rahul Bhandari as President of Terre-X society was elected and a team of four was unanimously selected for the IT cell of the society for session 2021-2022. To guide and supervise the society, an Advisory Committee was formed consisting of all faculty members of the department.



2. Teacher's Day Celebration: Considering the tough times, a 'Virtual Meet and Greet' was organized on Google Meet. The event commenced with a welcome speech by the President of Terre-X society. On behalf of all the students, few alumni and final year students shared their cheerful experiences with the faculty members and thanked them for being a beautiful steer in times of need. To pay homage to our beloved teachers, students recited a beautiful Sanskrit shloka. A small video was presented which embraced the merry moments of our teachers with the students. The event was concluded with a gratitude speech by the Secretary of the society.



Collect Rocks Day



3. Fresher's Welcome Ceremony

“Fresher's Welcome” in any college is an event that every student eagerly awaits. 28nd November 2021 was a memorable day for our society as we welcomed the new blood with enthusiasm and laughter. The event was held online through Google Meet. The program started with the formal welcome of all fresher's to the Department of Geology and was followed by the introduction of the faculty members and the society office-bearers. A virtual tour of the department was given to the new members, acquainting them with the classes, labs, pictures from previous field trips and events.

- **Honours/Distinctions Students with Distinctions**

Name of Student	Course and year	Honours/Distinctions/Achievement (Both academic/extracurricular/cocurricular/or any other)
Akash Nair	B.Sc. (H) Geology, 3rd Year	Awarded the University Gold Medal and certificate in the 98th Convocation ceremony which was held on 26th February 2022.
ManikaRawal	B.Sc. (H) Geology, 3rd Year	AIR-137 (IIT JAM)
Mohit Tiwari	B.Sc. (H) Geology, 3rd Year	AIR-229 (IIT JAM)
Deepti Dahiya	B. Sc. (H) Geology, 3 rd Year	AIR- 291 (IIT JAM)
Sandeep Saini	B. Sc. (H) Geology, 3 rd Year	AIR- 372 (IIT JAM)
JyotiJangra	B.Sc. (H) Geology, 3rd Year	AIR-389 (IIT JAM)
Juhi Rani	B.Sc. (H) Geology, 3rd Year	AIR- 439 (IIT JAM)
Eric Joseph	B.Sc. (H) Geology, 3rd Year	AIR- 455 (IIT JAM)
Gouripriya S Menon	B.Sc. (H) Geology, 2nd Year	Awarded with the Meritorious Award for the year 2021-2022 (CGPA: 9.64)
Apoorvi Jain	B.Sc. (H) Geology, 2nd Year	Awarded with the Meritorious Award for the year 2021-2022 (CGPA: 9.50)
Satwik Tiwari	B.Sc. (H) Geology, 2nd Year	Awarded with the Meritorious Award for the year 2021-2022 (CGPA: 9.50)
Abhay Kumar	B.Sc. (H) Geology, 2nd Year	Awarded with the Meritorious Award for the year 2021-2022 (CGPA: 9.50)

- **Publications Research Project – 3**

1. **Dr. Prem Kumar** published a paper entitled “Deciphering the role of meteorological parameters controlling the sediment load and water discharge in the Sutlej basin, Western Himalaya” in Journal of Environmental Management, 2021.

2. **Dr. Prem Kumar** published a paper entitled “Geotechnical and geological studies of Adit-6 of the railway tunnel between Rishikesh and Karnprayag in India focusing on the excavation methods and design of support analysis: a case study” in the Arabian Journal of Geosciences, 2022.

3. **Dr. Ravish Lal** published a paper entitled “New Field Observations on the Quaternary Geology and Vertebrate paleontological Occurrences in the Narsinghpur Region of Narmada valley (Central India)” in the Journal of Geological Society, London, 2022.

- [Patents Filed/Granted Seminars Organized - NA](#)

- [Conferences Organized - NA](#)

- **Seminar/Conference Presentations– 4**

1. **Dr. Prem Kumar** presented a paper entitled “Climate Controlled Hydrology effecting the River Discharge and Sediment Load in the Upper Catchment of the Chenab Basin.” At

International Virtual Conference in Geosciences with focus on Climate Change Perspectives (ICGCC-2021) Conference Paper 12, July, 2021.

2. **Dr. Prem kumar** presented a paper entitled “A Glimpse of Hydro-Meteorological Controls on The Geo-Hydrology of the Sutlej Basin, Western Himalaya, India.” at National Seminar on Recent Advances in Geoscience Research in India. Conference Paper. 1-2, July, 2021.

3. **Dr. Prem kumar** presented a paper entitled “Geo-Statistical observation of climate control on multi-decadal (1981-2020) runoff patterns in river basins of Indian subcontinent.” at International Virtual Conference in Geosciences with focus on Climate Change Perspectives (ICGCC-2021) Conference Paper 12, July, 2021.

4. **Dr. Prabhas Kumar Pandey** presented a paper entitled “Sustainable Mountain Tourism, Placing sustainability at the heart of mountain tourism” on International Mountain Day at NMHS, GBP NIHE HQs, Almora, Uttarakhand on 11th Nov., 2022.

- National/International MoUs Signed - NA
- Other Inter-Institutional Collaboration - NA
- Student under Exchange Program (Inbound/Outbound) - NA
- Number and percentage of students placed -
- Number of Companies visited for campus recruitment– NA
- **Extension and Outreach Activities –**

1. Collect rocks day Event

National Collect Rocks Day is celebrated on **September 16** of every year. Terre-X celebrated National Rock Collection Day by conducting an interactive virtual event on that day where the members of the society exhibited their amazing collections of rock, shells and field photographs from around the globe. A fruitful discussion sessions ran along with the exhibition.

2. Earth Science Week Celebration

This year, Earth Science Week was celebrated from **October 10th to 16th**. Members of Terre-X had volunteered as guides and exhibited a rock and fossil show at the National Science Centre, New Delhi on this week as part of our Earth Science Week celebrations.

Volunteering at National Science Centre

This activity was conducted to promote scientific communication in the field of Earth Science. The student guides were present at the following three exhibits, Water-Elixir of Life, The Prehistoric Gallery and Hall of Nuclear Power. The volunteers guided groups of visitors through each of these exhibits for a maximum of 10 minutes. A pre-guidance and post-guidance survey was conducted at each exhibit to evaluate the change in perspective of each group of visitors.

Earth Science Week



Rock and fossil show at National Science Centre

The Rock and Fossil show was conducted at the reception area where the members of the society displayed various fossils, rocks and minerals specimens from the college. Through the fossil specimens of ammonites, brachiopods and various other groups, the definition of fossils, their modes of preservation and value were described. The show really helped the attendees to increase their understanding and appreciation of fossils and minerals.

- **Other Significant Information**

Skill Development Course

A Skill Development Course was organized under the theme “**Evolution of the Himalayas and Integration of GIS Studies Using QGIS Software & R Programming Language**” from 7th – 20th July, 2021.

Course Coordinators:

1. Dr. Sarbari Nag 9818039300
2. Dr. Manika Gupta 9810162481
3. Dr. Ravish Lal 9773509676

Registration Details
Click this link for registration:
<https://forms.gle/83SkHoBsieHLszF9>
The Course is offered free of cost.

ABOUT THE COURSE

The lofty beautiful Himalayas have always been awe inspiring to everybody for different reasons. The geologists are excited by the variety of rocks, structures and sequences starting from the Precambrian to the Quaternary. Variety of mineral deposits both known, expected and unknown offer a large possibility for the country and the mankind in general. The difficult terrains add to the mystery of the mountains. Frequent landslides and earthquakes need special attention as a large number of population inhabiting there and visiting for different reasons need to be protected. Further, the fact that the place had been deep down the Tethys Sea and that it is the youngest and the highest mountains in the world now due to collision between the Indian Plate and the Eurasian Plate makes study of evolution of the Himalayas a very interesting aspect for geologists.

While working on long term data on regional to global scale, importance of computational activities increases, which allow us to investigate the Earth observation data/Satellite data which are easily accessible. In this respect, we would like to enhance the basic skills of researchers in utilization of remote sensing tools. The easily and free of cost powerful tools available are QGIS software and R-programming. This training will impart basic introduction in both QGIS and R for using remote sensing data in various areas of geosciences like land use and land cover classification, hydrological modelling. It will be a complete hands on online training with assignments.

This course aims to cover different aspects of Geology including new research findings, and teach latest tools to be able to increase understanding of not only the Himalayas and remote sensing tools, but also empower and make the students competent in serving the country in near future when they become professionals.

RAM LAL ANAND COLLEGE
UNIVERSITY OF DELHI
BENTO-JAUREZ MARG, NEW DELHI - 110021
Website- <https://rlaccollege.edu.in>

DEPARTMENT OF GEOLOGY
PRESENTS
SKILL ENHANCEMENT COURSE
ON
**EVOLUTION OF HIMALAYA AND
INTEGRATION OF GIS STUDIES USING
QGIS & R PROGRAMMING LANGUAGE**

7th – 20th July 2021

Rakesh Kumar Gupta
Principal

Geological Field Tours

Geological field tours field works are organized every year. During the last two years, due to the Covid-19 pandemic, virtual geological field works were being conducted. However, with the opening of the college, geological field works are being resumed. These field works are done by taking the students to outstation locations to expose them to the ultimate laboratory of Geology, i.e., in-situ rocks at its natural settings.

Following are the details of the geological field works conducted by the Department of Geology in this academic year (2021-2022).

Batch	Semester	Tour In-charges	Place	Tentative Date
Second Year	IV	Dr. Prabhas Kumar Pande, Dr. Ravish Lal & Ms. Leimiwon Zimik	Almora and surrounding area, Uttarakhand	30 th March to 6 th April, 2022
Third Year	VI	Dr. Sarbari Nag & Mr. Prem Kumar	Mandi and the surrounding area, Himachal Pradesh	30 th March to 6 th April, 2022
Third Year	VI	Dr. Sarbari Nag	Industrial Visit to Atomic Mineral Directorate of Exploration & Research (AMD), DOAE- R.K. Puram, New Delhi	28 th March, 2022

Field Tour to Almora, Uttarakhand



Field Tour to Mandi, Himachal Pradesh

Industrial Visit to AMD 28th March



Student Outreach Program

On May 10, 2022, members of Terre-X conducted a student outreach program in Sarvodaya Vidyalaya No.1, R.K. Puram. The students from classes 9-12 were addressed by the team. The event was organised from 9:00 a.m. to 12:00 p.m. in two phases. In the first phase, the students were briefed about Geology as a subject, its significance in our daily lives, the future prospects and the path to get into the field. The second phase focused on intriguing the interest of students in rocks and fossils, through a rock and fossil showcase, which was highly appreciated among not only the students but also the teachers. Our first outreach event was a successful event which was evident from the way students were curiously asking about different things discussed with them.



Department group photo

