



## RESEARCH INTERESTS

Paleoceanography, Paleoclimatology, Radiocarbon,  
Climate Change.

## ACADEMIC RECORDS

| Degree  | Institute/Board                          | CGPA/% | Year    | Subject  |
|---|--|--------|---------|--|
| Master of Science   | Indian Institute of Technology Kharagpur | 9.05   | 2021-23 | Geology<br>(up to 3rd Semester)                                  |
| Master of Science<br>(Left due to Health issues during the<br>2 <sup>nd</sup> wave of COVID-19) | Hansraj College, Delhi University        | 8.63   | 2020-21 | Geology  |
| Bachelor of Science   | Allahabad University                     | 72.52% | 2017-20 | Geology  Physics <br>Mathematics.                                |
| Senior Secondary<br>(XII)   | Uttar Pradesh State Board                | 89.8%  | 2017    | Physics  Chemistry <br>Mathematics  Hindi <br>English.           |
| Secondary<br>(X)  | Uttar Pradesh State Board                | 91.5%  | 2015    | Mathematics  Hindi <br>English  Science  Social<br>Science  Art. |

## RESEARCH PROJECTS

### Master Thesis Project

**Topic-** Surface water palaeoceanographic changes in the south-eastern Arabian Sea during the early Holocene: A study based on pteropod assemblage. August 2022- Present

**Supervisor:** [Professor Anil Kumar Gupta](#), Indian Institute of Technology Kharagpur.

### Summer Research Intern

**Topic-** Palaeoceanographic reconstruction using the marine core from the Indian Ocean. May- July 2022

**Supervisor:** [Professor Ravi Bhushan](#), [Physical Research Laboratory](#), Ahmedabad.

I gained practical experience with instruments including Accelerator Mass Spectrometer, Automatic Graphitization System, Coulometer, and Elemental Analyzer, and learn how to use them to investigate marine sediments. This summer internship has helped me to learn how different paleoclimatic proxies provide information about past climate conditions as well as climatic variability.

## SCHOLASTIC ACCOMPLISHMENTS

- Qualified **JRF- CSIR-UGC NET** (June 2022): **Rank- 98**
- Qualified **GATE** (2022) & (2023)
- Qualified **IIT-JAM** (Joint Admission Test for M.Sc.) (2021): **Rank- 103**
- Qualified **IIT-JAM** (2020)
- **Assistantship** for M.Sc. ( 2021-23). Awarded to **the top 25% of students** of the class by IIT Kharagpur.
- **Inspire scholarship** (2017-21). **Scholarship for Higher Education: DST, Government of India** for the **top 1 Percentile** in state board examinations.
- Won the **ArchaeOPTICS 2023**- the field photography competition, organized by **the Paleontological Society of India- North Zone**.
- I scored the **highest marks in Geology for three consecutive years** during my Bachelor of Science.
- **District topper** in Secondary & **School topper** in Senior Secondary Examinations.

## FIELD EXPERIENCE

|   |   |  |
|---|---|--|
| <b>Geological Excursion and Field Work in Bundelkhand Craton, Jhansi, Uttar Pradesh</b><br>Visited: Archean Greenstone Belt  TTG Gneisses  <a href="#">Dhala Impact Structure</a> BIF  Learnt outcrop, lithological, and, structural mapping in the area. | <i>Prof. Jayanta Kumar Pati</i>                                 | 08 <sup>th</sup> -16 <sup>th</sup> November 2019         |
| <b>Virtual Structural Fieldwork in South Delhi Fold Belt, Kumbhalgarh, Rajasthan</b><br><br>Kinematic analysis in the shear zone.   | <i>Prof. Anupam Chattopadhyay &amp; Prof. Pankaj Srivastava</i> | 12 <sup>th</sup> June 2021                               |
| <b>Geological mapping of Berach Granite along Great Boundary Fault, Chittorgarh, Rajasthan</b><br><a href="#">Outcrop Hunting</a>   Outcrop Mapping  <a href="#">Learned to arrange the Fieldwork on my own.</a>  | <i>With a PhD. Candidate</i>                                    | 26 <sup>th</sup> November- 1 <sup>st</sup> December 2021 |
| <b>Structural Geology Fieldwork in Eastern Ghat Mobile Belt, Angul, Odisha</b><br>Regional mapping  Plane paper mapping  Structural analysis of superposed folds  Strain analysis  Kinematic analysis.  | <i>Prof. Manish A Mamtani</i>                                   | 7 <sup>th</sup> - 14 <sup>th</sup> December 2021         |
| <b>Virtual Geophysical Fieldwork of Electrical Resistivity Survey in IIT Kharagpur</b>  | <i>Prof. Probal Sengupta</i>                                    | March 2022   |

## TECHNICAL & INSTRUMENTATION SKILLS

### Identification and separation of Microfossils (Foraminifera, Pteropods).

#### Spectrometry & Wet Lab:

Accelerator Mass Spectrometer (AMS)| Automatic Graphitisation System (AGE-3)| CN elemental analyser & its sample preparation| IRMS and its sample preparation| Coulometer and its sample preparation| Sub-sampling of the sediment core| Sample processing for chronology| Geochemical processing.

#### Geological mapping:

Initial reconnaissance and training in handling field equipment and recording planar and linear fabric elements field orientation data| Regional mapping| Plane paper mapping| Structural analysis of superposed folds| Strain analysis| Kinematic analysis| Introduction to digital mapping

#### Scientific Software and Packages used:

Google Earth Pro| ImageJ| Calib 8.2| Grapher| Matlab Onramp| Microsoft Office.

## KEY COURSES TAKEN SO FAR

Applied Micropaleontology| Micropaleontology & Paleoceanography| Marine Geosciences| Environmental Hazards & Mitigation| Geochemistry| Igneous Petrogenesis| Tectonics & Geodynamics| Sequence Stratigraphy| Basin Analysis| Advanced Structural Geology| Earth & Planetary Systems| Earth Surface Processes| Metamorphic Phase Equilibria | Remote Sensing & GIS| | Sedimentary Geology| Groundwater & Engineering Geology| Applied Mineralogy| Ore Genesis| Borehole Geophysics.

## POSITIONS OF RESPONSIBILITY

- ❖ Membership of (APECS) Association of Polar Early Career Scientists.
- ❖ Membership of AAPG- Student Chapter at IIT Kharagpur
- ❖ Executive Member of the Education Committee of Earth Science Study Circle (ESSC); a group of to be geologists/geophysicists working towards promoting earth science as one of the major subjects of interest.
- ❖ Member of (SPE) Society of Petroleum Engineers- Student Chapter at IIT Kharagpur.
- ❖ Membership in the (SGTSGI) (Structural Geology& Tectonic Studies Group- India)
- ❖ Membership in the (IASGT) International Association for Structural Geology & Tectonics.
- ❖ Subject Expert at CHEGG in Earth Science since FEBRUARY'22.