

AYUSH SHARMA

PhD Geochemistry

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HALB 305, Department of Geology and Geophysics, Texas A & M University, College Station, Texas, 77843

Education	Majors	Institute	Year	GPA
PhD	Geochemistry	Texas A & M University, College Station, TX, USA	2024-present	4.00/4.00
M. Tech	Earth Sciences	Indian Institute of Science, Bangalore, India	2022-2024	3.57/4.00
M.Sc. (hons)	Geology	Panjab University, Chandigarh, India	2020-2022	3.51/4.00
B.Sc. (hons)	Geology	Panjab University, Chandigarh, India	2017-2020	3.45/4.00

PROJECTS

Ongoing

Into the icehouse: Dramatic changes at the Devonian Mississippian Climate Transition (DMCT) |

Texas A & M University, College Station, TX, United States

(August'24- Present)

- Supervisor: Dr. Lucien Nana Yobo
- Co-Supervisor: Dr. Ethan L Grossman, Dr. Shuang Zhang

Completed

Influence of estuarine processes on the net flux of Rare Earth Elements in suspended particulates from Ganges to Bay of Bengal: A case study from Hooghly Estuary |

INDIAN INSTITUTE OF SCIENCE, BANGALORE

(August'23-April '24)

- Supervisor: Dr. Sambuddha Misra

1. Analysing Hydrometeorological Datasets in terms of seasonality, magnitudes and variability at monthly and annual time scales for Various Catchments in United States | April'23

INDIAN INSTITUTE OF SCIENCE, BANGALORE

- Supervisor: Dr. Pradeep Majumdar

2. Time series analysis of land use land cover dynamics and certain biophysical parameters in Rupnagar district of Punjab, India using QGIS and Google Earth Engine | November'23

INDIAN INSTITUTE OF SCIENCE, BANGALORE

- Supervisor: Dr. D Nagesh Kumar

WORK EXPERIENCE

Graduate Research Assistant

Spring'25 - Present

Texas A & M University, College Station, TX, United States

Graduate Teaching Assistant

Texas A & M University, College Station, TX, United States

- GEOL 101 Principles of Geology Fall'24
- GEOL 450 Geology Senior Project. Fall'24
Guided Senior Research Project on Geochemical analysis and Determination of tectonic setting of Proterozoic mafic dikes in Highland Mountains of Montana.
- GEOL 203 Mineralogy. Fall'25
Alternate Lab TA for two weeks.

SEG EVOLVE Carbon Solutions

Texas A & M University, College Station, TX, United States

- Serve as a Geologist and work with Team members on CCS data set. May'25-Present

Subject Matter Expert

March 2021 - December 2022

Chegg India Private Limited

- Earth Sciences Subject Matter Expert at Chegg India Private Limited.

Private Tutor

2014-2017, 2021

- Experience in tutoring High School students(grades 6-10) for subjects like, Mathematics and Science.

FIELD EXPERIENCE

Basic Geological field training : Sub-Himalayas, Siwalik Hills, Himachal Pradesh

Panjab University

(March 2019)

- Basics of geological field work; working of field equipment, traverse mapping, topographical characterisation, identification of lithology, structural characters and fossils in areas like Nada Sahib, Pinjore, Morni, Subathu, Kasauli and Dagshai of Himachal Pradesh.

Field Training, Structural Geology : Lesser Himalayas, Haryana

Panjab University

(December 2019)

- Identification of lithology, determination of strike-slip fault in Sabilpur Village, Khetpurali, district Ambala

Palaeontological Field Work of Lower-Middle Cambrian of Lesser Himalayas, Sirmaur, H.P

Panjab University

(May 2022)

- Lithology and Palaeontology of Kotidhiman, Khur, Jarag regions of Sirmaur District, Himachal Pradesh

SKILLS

- **Instruments:** Triton Plus TMS, iCAP Q ICP-MS, Element XR, Agilent 5800 ICP-OES, Agilent 8900 ICP-MS Triple Quad, Anton Par Multiwave 7000 digester.
- **Softwares/Programming language:** QGIS, MatLab, BRAT, Origin Pro, Google Earth Engine, JavaScript, Java, Microsoft Office Packages.

AWARDS AND ACHIEVEMENTS

- UNOCAL Fellowship, Department of Geology and Geophysics, Texas A & M University (2025).
- Ministry of Education (MoE) funded graduate fellowship (2022-2024).
- IIT JAM Qualified: All India Rank 96 (2022).
- GATE Qualified: Score 350 (2022).
- Silver Medalist: B.Sc. (Hons) Geology.
- Certificate Of Appreciation - Junior Einstein (NGO).

ATTENDEE AND WORKSHOPS

- Third International Conference on Saraswati River (ICSR-2019), organized by Panjab University, Chandigarh, in collaboration with Haryana Sarasvati Heritage Development Board, Panchkula (Haryana).
- Workshop-cum-Seminar on Energy Scenario in a Consumer Driven India, Organized by the Department of Geology, Panjab University, Chandigarh, in collaboration with ONGC.
- Online training programs on "Fundamental of Mapping Techniques" and "Basic of Remote Sensing," organized by GSITI.

POSITIONS OF RESPONSIBILITY

Roles and Responsibility

Texas A & M University, College Station, TX, United States

- Department Research Symposium Chair, TAMU GGGSC Fall'25- Current
- Vice President, TAMU NABG Fall'25- Current
- Outreach Chair, TAMU SEG Fall'25- Current

Indian Institute of Science, Bangalore

- Event Coordinator of Dance Battle Competition at the annual fest, "Rhapsody'23".

Panjab University, Chandigarh, India

- Department Representative 2019 - 2021
- Class Representative 2017 - 2018
- Event Coordinator of Poetry Competition at inaugural ("Aaghaz'19") and annual science fest ("Scitron'20").

Volunteer

- Led a Lab Crawl for the Summer School' 25, Department of Geology and Geophysics, Texas A & M.
- Volunteer at the 15th Annual Geology and Geophysics Research Symposium, Texas A & M.

- Active Member of Dance Group at IISc, Bangalore.
- National Service Scheme (2017-18).
- Junior Einstein NGO- Academic Support Volunteer (2018-2020).
- Waste Warriors NGO- Waste Collection and Management Volunteer (2017).

Sports

2017 - 2018

Panjab University, Chandigarh

- Merit Certificate for Volleyball winning team.
- Merit Certificate in 100m race.

HOBBIES/INTERESTS

- Travelling, Trekking, Hiking, Cooking, Dancing, Photography, Storytelling, Cycling, Running, Gardening, Drawing, Teaching .
- Management and Planning.

LANGUAGES SPOKEN

- English, Hindi, Punjabi (native).