

## CURRICULAM VITAE

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### Professional Experience

- 2021- 2022      **Organization:** Remote Sensing Application Centre, UP, Lucknow.  
**Designation:** Project Scientist (Temporary)  
**Project Topic:** Smart City Project  
**Job responsibilities:** Updating data in maps using ArcGIS. Report writing
- 2015- 2021      **Organization:** Indian Institute of Technology Bombay.  
**Designation:** Research Scholar  
**Project Topic:** Meso and micro-scale structural evidence of Chaura thrust.  
**Job responsibilities:** Microstructural observation, structural analysis and interpretation to understand the tectonics of Chaura area.
- 2013- 2015      **Organization:** Indian Institute of Technology Bombay.  
**Designation:** Teaching Assistant and Junior Research Fellow.  
**Research Topic:** Tectonics of Chaura thrusting in NW Himalaya: Insights from Chaura area (Himachal Pradesh, India).  
**Job responsibilities:** Fieldwork in and around Chaura area for structural analysis and interpretation of Chaura thrust in Sutlej section, Himalaya
- 2012- 2013      **Organization:** Indian Institute of Technology Bombay  
**Designation:** Temporary Junior Research Fellow.  
**Research Topic:** Extrusion mechanism of the Sutlej section of the Higher Himalaya deduced from the thermal history and structures.  
**Job Responsibilities:** Field study and Micro-structural observation to understand the extrusion mechanism of Higher Himalaya of Sutlej.

### Education

- 2015- 2021      **Doctor of Philosophy**  
**Institution:** Indian Institute of Technology Bombay.  
**Title:** Meso and micro-scale structures associated with an out-of-sequence thrust at Chaura, western Himalaya, Himachal Pradesh, India.  
**CGPA:** 9.18/10.00 (Absolute scale)
- 2010-2012      **M.Sc. Applied Geology.**  
**Institution:** Indian Institute of Technology Bombay.  
**Dissertation Title:** Study of drag folds in fields and analogue models.  
**Brief Description:** This work involved drag folds development in different terrains and correlated with analogue modelling.  
**CGPA:** 7.63/10.00 (Absolute scale)
- 2007-2010      **B.Sc. Geology (H), Chemistry, Mathematics, Environment Science.**  
**Institution:** Presidency College, University of Calcutta, Kolkata.  
**Percentage:** 63.125 %.

## Projects/Internships/Trainings

- May, 2022                      **Topic:** Engaging Youth and Adolescents in DRM and CCA  
**Organization:** National Institute of Disaster Management, Ministry of Home affairs, Government of India.  
**Description:** Online training on Disaster risk reduction (DRR) and climate change adaptation (CCA) for addressing the increased risk of disasters caused by climate change, viz. flooding.
- October, 2021                      **Topic:** Geographic Information System  
**Organization:** NPTEL, and IIT Kharagpur  
**Description:** Certificate course on GIS
- September, 2021                      **Topic:** Remote sensing and GIS  
**Organization:** NPTEL, and IIT Guwahati  
**Description:** Certificate course on remote sensing and GIS.
- July, 2021                      **Topic:** Machine learning to deep learning: Remote sensing data  
**Organization:** IIRS and ISRO, Dehradun.
- June, 2021                      **Topic:** Interpreting Ground Penetrating Radar Data Part-I, Part-II  
**Organization:** Sensors & Software Inc. Canada  
**Description:** Special certificate course on GPR.
- April, 2021                      **Topic:** GIS for Supply Chain Management.  
**Organization:** IIRS and ISRO, Dehradun.  
**Description:** This training program was involved in understanding and utilization of GIS for Supply Chain management.
- September, 2015                      **Topic:** Field training workshop on Sedimentation, Tectonics and Quaternary landforms of Zaskar valley, Ladakh.  
**Organization:** Department of Science and Technology, Delhi.  
**Brief Description:** This field training program was designed to understand to the Sedimentation, Tectonics and Quaternary landforms of Zaskar Valley.
- December, 2013                      **Topic:** Winter School in Geomathematics.  
**Organization:** Wadia Institute of Himalayan Geology, Dehradun.  
**Brief Description:** This training program was designed to understand and learning the mathematical approach in geological sciences. The mathematical derivation for describing the geological phenomena.
- October, 2013                      **Topic:** Bauxite beneficiation and waste recycling in Aluminum Industry.  
**Organization:** Indian Institute of Technology Bombay.  
**Description:** This training was involved to discuss waste recycling in Aluminium Industry and Industrial Bauxite beneficiation process.
- 2012- 2013                      **Topic:** Satellite project-3. Extrusion mechanism of the Sutlej section of the Higher Himalaya deduced from the thermal history and structures.  
**Organization:** Indian Institute of Technology Bombay.  
**Description:** It was a field based and lab oriented project for learning extrusion mechanism of the Sutlej section of Higher Himalaya from thermal history and structures.

- December, 2011  
**Topic:** Study of drag folds in fields and analogue models.  
**Organization:** Indian Institute of Technology Bombay.  
**Description:** Detail studies of drag folds in different terrains (sedimentary and meta-sedimentary) and try to correlate the mechanisms. Data generated in geodynamic lab through analogue modelling and correlated with field data from Mumbai and Rajasthan.
- July, 2011  
**Topic:** Uranium exploration prospect of the Chitrial outlier (Cuddapah).  
**Organization:** Atomic Minerals Directorate (AMD), Hyderabad.  
**Brief Description:** This intern program involved radiometric survey using scintillometer in the field and construction of geological cross section using litho-logging and gamma ray logging. Hands on training of sample preparation and for XRD, XRF, TIMS and SIMS.
- June, 2011  
**Topic:** Exploration activities of coal mines, interpretation of litho-logs.  
**Organization:** CMPDI, RI-IV (subsidiary of Coal India), Nagpur.  
**Description:** This intern program involved sample collection and processing of raw data for interpretation litho-logs using MINEX software. Studied preparation of floor contouring map using limited data. Made brief interpretation of under-ground coal mining prospects of Bander coal field area, Nagpur, Maharashtra
- May, 2011  
**Topic:** Exploration techniques, mining methodologies of Iron ore mines.  
**Organization:** Steel Authority of India Limited, Bolani Iron Ore Mine.  
**Description:** This program involved learning of various mining methodologies involving in extraction ore processing, ore washing and various geological settings of iron ore and environmental policies adopted by SAIL.
- December, 2010  
**Title:** Structural mapping, structural analysis of meta-sedimentary rocks.  
**Organization:** Indian Institute of Technology Bombay.  
**Description:** It was a field training for understanding and learning about structural elements for geological mapping and structural analysis of meta- sedimentary rocks of Delhi Super group around Surpagla village, Sirohi district, near Ambaji, Rajasthan.
- January, 2010  
**Title:** Stratigraphic study of Aravalli, Delhi Supergroup and Mine visit.  
**Organization:** Presidency College, Kolkata.  
**Description:** This field program was based on understanding of geological structures and stratigraphic correlations in the field of Aravalli and Delhi Supergroup of rock of Rajasthan and lead-zinc mine visit.
- November, 2009  
**Title:** Structural mapping in Singhbhum Shear Zone, Galudih.  
**Organization:** Presidency College, Kolkata.  
**Description:** This field program was based on structural mapping and interpretation of highly deformed terrain of Singhbhum Shear Zone near Galudih, Jharkhand.

## Research Articles and Books

No.	Title of Journal's name, Year of publication, Vol. No., Page Nos.
1.	<b>Ghosh, R.,</b> Mukherjee, S., 2021: Structures of Lesser/ Greater Himalaya in and Around an Out-of-Sequence Thrust in the Chaura-Sarahan Area (Himachal Pradesh, India). In: Mukherjee S. (eds.) Structural Geology and Tectonics Field Guidebook — Volume 1. Springer Geology. Springer, Cham.
2.	Ghosh, R., 2015: Book review on 'A Petrographic Atlas of an Ophiolite: An Example from the Eastern India– Asia Collision Zone' Current Sciences, 108(4) pp.731.
3.	Ghosh, R., 2014: Book review on “Atlas of Shear zone structures in Meso Scale”. Soumyajit Mukherjee. Geological Journal.
4.	Bandyopadhyay, S., Ghosh, R., 2014: A mathematical treatment of geoscientifically relevant problems. Current Sciences, Vol. 106, Issue 6, pp. 794.
5.	Mukherjee. S, Ghosh, R., 2014: ‘Nyalam detachment’, ‘Nyalam shear zone’ and ‘Nyalam Thrust’ within the Greater Himalayan Crystallines, South central Tibet, TSG-Annual Meeting, Cardiff University, pp. 78.
6.	Ghosh, R., Mukherjee. S., 2013: Photograph of the Month. Journal of Structural Geology, 56, pp. 174 - 175.
7.	Ghosh, R., 2013: Book Review on “Deformation of Microstructures in Rocks”. Soumyajit Mukherjee. Current Sciences, 105, pp. 1001.
8.	Ghosh, R., 2013: “Temperature prediction inside Main Central Thrust Zone from grain boundary migration studies, Bhagirathi River Valley (NW Himalaya, India)”, DRT 2013, Belgium, pp. 45.
9.	Ghosh, R., 2013: “GBMs in rock samples studied under optical microscope and prediction of temperature” in National conference, “Microstructure-Diffraction-2013”, IIT Bombay & BARC
10.	Ghosh, R., Mukherjee, S., 2012: “Analogue modelling of Drag folds: field Examples” in RDS-II, National Conference, Lucknow University, Lucknow, India, pp-49.

Sl. No.	Publication Type*	Title of the Book Chapter/Book/ Conference Proceeding, with year of publication and other publication details.	International/ National	Author-ship*
1.	Academic Books	In Book: Atlas of Structural Geology (2 <sup>nd</sup> edition) 2021. Chapter: 06 (Trapezoid shaped mud inclusion) Figure: 6.64. Edited by Mukherjee, S., Elsevier, 9780124201521.	International	One of the Author
2.	Academic Books	Structural Geological Atlas. 2020: Mukherjee, S., Bose, N., <b>Ghosh, R.</b> , Dutta, D., Misha, A.A., Kumar, M., Dasgupta, S., Biswas, T., Joshi, A., Limaye, M.,	International	Third Author
3.	Academic Books	In Book: Atlas of Structural Geology. 2015. Chapter: 02 (Ductile shear zones). Figure: 2.10, 2.12, 2.13. Edited by Mukherjee, S., Elsevier, 9780124201521.	International	One of the Author

**Recent activities:**

Participated in the webinar on "Satellite Remote Sensing for Understanding the Natural Hazards and Mitigation Strategies" organized by National Institute of Disaster Management, Ministry of Home Affairs, Government of India.

Participated in the webinar on "GIS Based Tools for Forest Fire Mapping and Management " organized by National Institute of Disaster Management, Ministry of Home Affairs, Government of India.

Participated in the webinar on "Geo-hazards Risk Assessment and Mitigation Strategies organized by National Institute of Disaster Management, Ministry of Home Affairs, Govt. of India in collaboration with Babasaheb Bhimrao Ambedkar University.

Participated in the webinar on "Public Health Emergency Management and Public Health Emergency Operations Centers " on 20 Apr 2022 organized by National Institute of Disaster Management, Ministry of Home Affairs, Govt. of India in collaboration with National Centre for Disease Control (NCDC) U.S. Centers for Disease Control and Prevention (CDC)

Attended webinar on GIS Technologies for Health, Disaster Management by A. V. Vidyapeetham.

Attended Special course GIS for Supply Chain Management by IIRS & ISRO, Dehradun

Attended webinar on Some Essential Concepts of Mineral Inventory Estimate by Datacode.

Attended webinar on Mining Industry: Reforms and Way Forward by ISMAA Kolkata Chapter.

Attended webinar on Earth observation based Monitoring on Landslide by IIRS & ISRO.

Attended webinar on Discrete Event Simulation Applications Operations by SRK Consultancy.

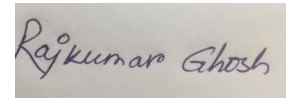
**Technical Proficiency:**

**Software:** Arc-GIS, MS office, GPR, Corel draw.

**Geological Instrument:** Petrological Microscope, XRD, XRF, LA-ICPMS, SIMS, TIMS.

**Languages:** Bengali, English, Hindi.

**Declaration:** I hereby declare that the above mentioned information's are true to the best of my knowledge and belief.



(Rajkumar Ghosh)