



Dr. Indrani Mondal

Assistant Professor

Department of Geology,

Kabi Jagadram Roy Government General Degree College, Mejia, Bankura-722143, India.

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• Research Interest:

- Proterozoic Shale Geochemistry
- Proterozoic Bio sedimentology, Biogeochemistry
- Paleogeography, paleoenvironmental studies of Proterozoic sediment.
- Precambrian life
- Medical Geology and Health hazard

• Academic Qualification:

EXAMINATION	INSTITUTE	BOARD/ UNIVESITY	YEAR	PERCENTAGE
Secondary	U.G.M.K GIRLS' HIGH SCHOOL	WBBSE	2008	91.2
Higher Secondary	U.G.M.K GIRLS' HIGH SCHOOL	WBCHSE	2010	88.8
B.Sc.	JADAVPUR UNIVERSITY	JADAVPUR UNIVERSITY	2014	70.01
M.Sc.	JADAVPUR UNIVERSITY	JADAVPUR UNIVERSITY	2016	75.68
Ph.D	JADAVPUR UNIVERSITY	JADAVPUR UNIVERSITY	2024	-----

• Teaching Experience:

- **Kabi Jagadram Roy Government General Degree College, Mejia.**
 - *Role:* Assistant Professor (W.B.E.S.)
 - *Tenure:* December 9, 2020 – Present
 - *Key Subjects Delivered:* Sedimentology, Paleontology, Petroleum geology, Stratigraphy, Earth System Science, Geochemistry, Economic Geology, River Science, Geomorphology, Medical Geology, Sedimentology
- **J.K. College, Purulia.**
 - *Role:* Assistant Professor
 - *Tenure:* August 9, 2019 – December 8, 2020
 - *Key Subjects Delivered:* Earth System Science, Geochemistry, Sedimentology, Fuel Geology, Hydrogeology, Geomorphology, Stratigraphy

• Achievements

- Qualified joint CSIR-UGC test for junior research fellowship and eligibility for lectureship (NET) in 2016.
- Selected as Assistant Professor in Geology, West Bengal College Service Commission on 03.06.2019.
- Selected as Assistant Professor in Geology, W.B.E.S (West Bengal Public Service Commission, Higher Education Department) on 25th September, 2020.

• List of Publications

1. Mandal, S., Choudhuri, A., **Mondal, I.**, Sarkar, S., Chakraborty, P. P., & Banerjee, S. (2019). Revisiting the boundary between the Lower and Upper Vindhyan, Son valley, India. *Journal of Earth System Science*, 128, 1-16.
2. Mandal, S., Banerjee, S., Sarkar, S., **Mondal, I.**, & Choudhuri, T. R. (2020). Origin and sequence stratigraphic implications of high-alumina glauconite within the Lower Quartzite, Vindhyan Supergroup. *Marine and Petroleum Geology*, 112, 104040.
3. **Mondal, I.**, Koner, A., Choudhuri, A., & Sarkar, S. (2022). Paleoenvironmental Dynamics in a Mesoproterozoic Epicontinental Sea, Faded Shale, Son Valley, India. In *Geochemical Treasures and Petrogenetic Processes* (pp. 279-313). Singapore: Springer Nature Singapore.

- **Abstract
Published in
Conference
Brochure**

4. Mandal, S., Srimani S., **Mondal, I.**, Choudhuri A., Das,A., Das, K., Banerjee, S., Sarkar, S. Seismic-Aseismic impact on marine depositional dynamics and sedimentary architecture: Study on multilayer - multiscale SSDS in Proterozoic Rohtas Limestone, India. In Sedimentary Geology (Available online)
5. Choudhury, T. R., Srimani, S., **Mondal, I.**, Chakrabarty, A., Banerjee, S., & Sarkar, S. (2024). Berthierine authigenesis as grain pseudomorph? A new insight from the early Maastrichtian Kallankurichchi Formation, India. Applied Clay Science, 249, 107255.
6. **Mondal, I.**, Choudhuri, A., Choudhury,T.R., Koner, A., Mandal, S., Sarkar, S. Sedimentology, sequence building and geochemical reappraisal of the black shale of Mesoproterozoic Rampur Shale Member, Vindhyan Basin, India and its implications. Journal of Palaeogeography, Volume 14, Issue 3, 2025, 100259, ISSN 2095-3836, <https://doi.org/10.1016/j.jop.2025.100259>.
7. N., Chakraborty, S., Srimani, I., **Mondal, S.**, Mandal, R. Nagendra, S., Sarkar. Sequence Development in Relation to Sedimentation History of the Cretaceous-Miocene Cauvery Basin: A New Outlook, 2025. Geology of the Cauvery Basin in South India (ISBN 9781032710471) Taylor and Francis Group, CRC Press. P-32.

1. **Mondal, I.***, Chaudhuri, A., Sarkar, S. 2019. Spectacular Morphic and Geochemical Record of Microbial Consortia in the Mesoproterozoic Rampur Shale, Son Valley. in National Seminar on Sedimentary researches: 35th convention of Indian Associations of Sedimentologist (IAS).
2. Mandal S, Chanda P, **Mondal I.** 2019. Seismites: Rocords from the Rohtas Limestone Formation, Vindhyan Supergroup, Central India. 35th Convention of Indian Association of Sedimentologist (IAS).
3. Choudhuri A, **Mondal I**, Mandal S, Sarkar S. 2019. Tempestites vs. Fluxoturbidites: Transition between the Koldaha Shale and the Chorhat Sandstone, Vindhyan Supergroup. 36th Convention of International Association of Sedimentology.
4. **Mondal, I. ***, Chaudhuri, A., Sarkar, S. 2020. Fingerprints of Microbiota in the 1.5 billion years old Rampur Shale, Central India". HUMBOLDT KOLLEG on "Food, Livelihood, Opportunity and Wood (FLOW)".
5. **Mondal, I. ***, Choudhuri, A., Koner, A., & Sarkar, S. 2022. DOES Mg -ENRICHMENT OF PRECAMBRIAN GLAUCONITE OWE TO HYDROTHERMAL INPUT?" in National Conference On "Current Understanding from the Indian Sedimentary basins and Road Ahead". 38th IAS Convention.
6. Chakraborty N., Barman L., Mandal A., Ghosh S., **Mondal I.**, 2022.Tidal(?) influence recorded within Gondwana Fluvials: Triassic Panchet Formation, Raniganj Basin (Damodar Valley), India. "Current Understanding from the Indian Sedimentary basins and Road Ahead". 38th IAS Convention.
7. **Mondal I.**, 2024. Sedimentation, Sequence development and Geochemical evolution of Black Shale: A case study from Rampur Shale Member, Vindhyan Supergroup, Central India in National Conference on An Odyssey of Sedimentology from Precambrian to Anthropocene: Significant contributions in Environmental Climatic and Energy Research; 40th Convention of Indian Association of Sedimentologists.
8. **Mondal I.**, 2025. Influence and effects of earth materials on health hazards: A systematic review related to Geomedicine and Medical Geology, two-day international seminar on Environment: think Globally, Act locally. 28-29 July, 2025, organised by Nistarini College Purulia.

- **Projects &
Trainings:**

- One-Week Training Program on "Frontiers of Earth Science" 12 -18 July, 2022 Organized by Department of Geological Sciences, Jadavpur University, Kolkata-700 032 under Synergistic Training Program Utilizing the Scientific & Technological Infrastructure (STUTI) programme of Indian Institute of Technology (ISM) Dhanbad-826004; An initiative of Department of Science & Technology (DST), Govt. of India.
- Participated in UGC Sponsored 12th Faculty Induction Programme (Guru Dakshita), organized by HRDC, Jadavpur University from 13.02.2023-16.03.2023.
- Participated in a refresher course "Disaster Management" organised by UGC-MMTTC, Centre for Disaster Preparedness and Management, Jadavpur University from 04/12/2024-17/12/2024.

- **Extra Academic Activities**

- Participated as Joint Convener in a National Seminar (Virtual Mode) on “Modern Trends in Earth Sciences, (20th -21st November’21) organized by Kabi Jagadram Roy Government General Degree College, Mejia, West Bengal.
- Participated as Joint Convener in a National Seminar (Virtual Mode) on “Fundamentals of Planetary science: Methods and Scopes” held on June 3, 2022. organized by Kabi Jagadram Roy Government General Degree College, Mejia, West Bengal.
- Participated as organizing secretary in A one day Field cum Workshop on “Study of Modern Sediments in Damodar River Basin” on 13th March 2023.
- Participated as organizing secretary in Seminar on “Career guidance for students in National Examinations: An interactive session” on 13th March 2023.
- Participated as organizing secretary in One-day Seminar on “Clay minerals and their applications in Earth Sciences” on 14th March 2023.
- Participated as a convener in a seminar on “Weather Forecasting on Thunderstorm, cyclones and Tornadoes.” on 24.03.2025 to celebrate International Meteorological Day.
- Participated as Course Co-Ordinator in a national level certificate course on “Antarctica: Exploring a Continent of Wonders” where A total of 48 students from (Nine (9) colleges like T.D.B College Raniganj, Durgapur Govt. College, Hooghly Mahasin College, Asutosh College, Jogomaya Devi College, Presidency University, J.K College Purulia and our College) enrolled in the course. 11 resource persons (eight persons visits Antarctica several times) from renowned institutions were invited to take classes The detailed syllabus and class schedule were communicated prior to the start of the course, and all enrolled students successfully completed it. Duration of the course was 10 days (35hours) from 21/10/2024-30/10/2024 (Hybrid mode).

- **Invited Lectures:**

- Invited as a resource person in one day state level seminar on “Rocks and mineral” organized by Nistarini College, Purulia and delivered a talk on “Unveiling the diversity and richness of rocks, minerals and soils of Purulia: Geological insights and application” on 20.12.2024

- **Language:**

- **Language:** Bengali, English & Hindi

- **Software Skills:**

- MS Office (Word, Excel & Power Point).
- Coral Draw.
- Basic of C programming language.
- Basics of Generative AI tools.

- **CERTIFICATION COURSES**

- Completed Certification Course on Infoedge (computer course) from NIIT, Hazra, Kolkata.
- Completed Certification Course on “Application of geospatial technology” from WEBEL OPSIS PVT. LTD.

- **Machine Handling**

- SEM – EDS (Carl Zeiss).
- Petrographic Microscope.

Field Experience:

- Maithan, West Bengal: Studied field mapping techniques, metamorphic and sedimentary rocks, and visited opencast and underground mines.
- Jabalpur, Madhya Pradesh: Focused on litho-contact facies, isograd mapping, and metamorphic rock studies.
- Chandipur, Odisha: Conducted paleontological and sedimentary rock studies, visiting ancient sedimentary units.
- Ghatshila, Jharkhand: Analyzed structural deformation, fold axes, and fault planes through mapping.
- Joda, Odisha: Explored iron and manganese mines, focusing on ore processing and chemical analysis.
- Darjeeling, West Bengal: Investigated Lower Siwalik facies, fossil assemblage and paleohydrology.
- Vindhyan Basin, Madhya Pradesh (visited multiple instances): Examined sedimentary rock; facies analysis, stratigraphic correlation, identified parasequences, collected samples for petrography and geochemical analysis in the Rampur Shale, Semri Group.
- Gondwana, Raniganj Basin: Studied sedimentary rocks; facies, and fossil assemblages within the Gondwana Supergroup.

Indrani Mondal.

Signature

Date: 01.08.2025