Curriculum Vitae

Dr. LOPAMUDRA ROY

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LANGUAGES PROFICIENCY

English- Professional Fluency
Hindi- Basic Fluency
Bengali- Mother Tongue

CAREERS

1) 15th July, 2024- 14th July, 2025, IPDF, IIT Bombay
2) 2020–2023, DST-INSPIRE Senior Research Fellow, BSIP, Lucknow
3)2018-2020, DST-INSPIRE Junior Research Fellow, BSIP, Lucknow

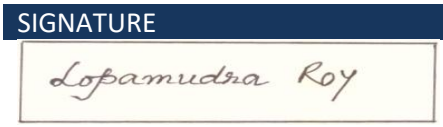
FELLOWSHIP/ AWARD RECEIVED

1) Received **DST-INSPIRE FACULTY Award** IN **2024 Call**
2) Received **DST-INSPIRE Fellowship** for Ph.D. (2018–2023)
3) Recipient of **Gold Medal** for achieving 1st Rank in M.Sc.
4)Received **UGC Post-Graduate Indira Gandhi Scholarship** (2015–17)

PERSONAL DETAILS

Gender- Female
DOB - 01/05/1993
Blood Group- A+
Marital Status- Married
Father's Name - SUJIT ROY
Mother's Name - RAJLAKSHMI ROY

SIGNATURE



Current Position

DST-INSPIRE Faculty at **Department of Earth Sciences, Indian Institute of Engineering Science and Technology, Shibpur (IIEST)** from **14th August, 2025.**

Work Experience (1 Year)

Institutional Post- Doctoral Fellow (IPDF) (Mentor: **Dr. Jahnavi Punekar**), Department of Earth Sciences, **IIT Bombay** (15.07.2024- 14.07.2025).

Academic Qualifications

Ph.D. in Sciences (Geology), University of Lucknow and Birbal Sahni Institute of Palaeosciences (BSIP), Lucknow: **04th January, 2024**
Thesis Title: **Reconstruction of late Miocene to Pleistocene palaeoclimate using micropalaeontology and geochemical analysis from the sediment core of northeast Indian Ocean.**
Supervisors: **Dr. Amit Kumar Ghosh** & **Prof. Sarajit Sensarma**

COLLEGE AND SCHOOL LEVEL

Exam	University/ Board	Institution/ School	Year of Passing	Percentage (%)
M.Sc	Kazi Nazrul University	Durgapur Govt. College	2015-17	84.2%
B.Sc	Burdwan University	Durgapur Govt. College	2012-15	70.1%
12th standard	W.B.C.H.S.E	Asansol Manimala Girls' High School	2011	83.2%
10th standard	W.B.B.S.E	Asansol Manimala Girls' High School	2009	87.4%

PUBLICATIONS

Total Publications: 15 peer- reviewed (Sci-journals– 11 and book chapters– 3)
Journals- *Deep-Sea Research Part II, Comptes Rendus Palevol, Micropaleontology, Marine Micropaleontology, Journal of Foraminiferal Research, Acta Geologica Polonica, Journal of Earth System Sciences* etc.
Research Gate: *https://www.researchgate.net/profile/Lopamudra-Roy-4*
Google Scholar: *https://scholar.google.com/citations?user=9R8xD3Qd94YC&hl=en*

RESEARCH INTERESTS

Neogene and Quaternary climatic changes, reconstruction of Palaeoenvironment and palaeoceanography with the help of siliceous microfossils (diatom, radiolarian, silicoflagellate), calcareous nannofossil, planktonic foraminifera, geochemical analysis and mathematical modelling techniques.

EXPERIENCE

***Operating system*:** MS-DOS, Windows XP, Windows 7, 8, 10.
***Data analysis*:** Origin Pro 8.5, Adobe Photoshop 7.0, CorelDraw 2017, PAST 3.0 and large datasets of microfossils, geochemical proxy data, MATLAB, Mathematica.
***Field expeditions*:** Andaman Group of Islands (Ph.D., 2019); Rajasthan, Odisha and Maithon (B.Sc and M.Sc).
***Laboratory experience*:** 5+ years of experience in handling samples for micropalaeontological (siliceous & calcareous) analyses, geochemical analyses.
***Scientific writing*:** Scientific papers and book chapters for peer-reviewed journals.
Journal reviewing: Journal of Environmental Biology, Journal of Geological Society of India.

Academic Membership

Member of The Micropalaeontological Society (TMS)

Publications (Full Articles)

1. **Roy L.**, Ghosh A.K., Bhaumik A.K., 2025. High resolution Miocene to Pleistocene calcareous nannofossil biostratigraphy from northeast Indian Ocean: A comprehensive analysis on biohorizons, global correlation, palaeogeography, palaeoecology and sedimentation rate. Deep-Sea Research Part II, 223 (2025) 105517. https://doi.org/10.1016/j.dsr2.2025.105517.
2. **Roy L.**, Ghosh A.K., Bhaumik A.K., 2025. Tortonian–Messinian radiolarian events from Northeast Indian Ocean – diversity analysis, palaeogeographic distribution and depositional environment. *Journal of Earth System Sciences*, 134, 1-25, https://doi.org/10.1007/s12040-024-02481-2.
3. Bhaumik, A.K., Chaudhuri, S., Kumar, S., Mohanty, S., **Roy, L.,** Ghosh, A.K., Chowdhury, S., Behara, T., 2024. Biostratigraphy and sedimentation rate estimation of Quaternary sediments of the Krishna-Godavari Basin, Bay of Bengal: Evidence from NGHP-01 Holes 10D, 5C and 3B. *Micropaleontology*, 70(3), 239-252. http://doi.org/10.47894/mpal.70.3.03.
4. **Roy, L.,** McCartney K., Ghosh, A.K., Bhaumik A.K., Sensarma, S., 2023. Tortonian silicoflagellates from the offshore of northeast Indian Ocean. *Deep-Sea Research Part II,* 210 (2023), 105297. https://doi.org/10.1016/j.dsr2.2023.105297.
5. Dey, R., Basso, D., Chakraborty, A., **Roy, L.,** Bhaumik A.K., Ghosh, A.K., 2023. Rhodolith forming coralline red algae in the $CaCO_3$ biofactory — A case study from the Serravallian of tropical northeastern Indian Ocean. *Comptes Rendus Palevol*, 22(26), 541-567. https://doi.org/10.5852/cr-palevol2023v22a26.
6. **Roy L.,** Ghosh A.K., Bhaumik A.K., Chakraborty A., Sensarma, S., Dey R., Saxena S., 2022. Diatom assemblages from the Tortonian of northeast Indian Ocean (NGHP-01-17A): its correlation with significant radiolarian and calcareous nannofossil events. *Micropaleontology*, 68(1), 51-84. https://doi.org/10.47894/mpal.68.1.03.
7. Saxena S., Chakraborty A., Galović I., **Roy L.,** Ghosh A. K., 2022. New insights into the earliest occurrence, possible evolutionary lineage, palaeogeography and palaeoclimatic implications of *Nicklithus amplificus*: Evidence from the Adriatic Sea, Indian Ocean and Paratethys. *Marine Micropaleontology,* 172 (2022), 102111. https://doi.org/10.1016/j.marmicro.2022.102111.
8. Dey, R., Ghosh A.K., **Roy L.,** Chakraborty A., Bhaumik A.K., Saxena S., 2022. Burdigalian-Serravallian radiolarians from Havelock Island, Northeast Indian Ocean and their palaeoecological significance. *Micropaleontology,* 68(4), 345-374. https://doi.org/10.47894/mpal.68.4.01.
9. Chakraborty A., Ghosh A.K., McCartney, K., Saxena S., Dey R., **Roy L.,** 2021. Early Pliocene calcareous and siliceous microfossils of the Sawai Bay Formation, Car Nicobar Island, northern Indian Ocean. *Acta Geologica Polonica,* 71(2), 175-198. https://doi.org/10.24425/agp.2020.134554.
10. Dey, R., Ghosh A.K., Bhaumik A.K., Chakraborty A., Saxena S., **Roy L.,** 2021. Late Pliocene to early Pleistocene planktonic foraminifera from Northern Indian Ocean (Andaman and Nicobar Islands): Interpretation on cooling event and ocean upwelling. *Journal of Foraminiferal Research,* 51(3), 115-138. https://doi.org/10.2113/gsjfr.51.3.115.
11. Saxena, S., Chakraborty, A., Ghosh, A.K., Dey, R., **Roy L.,** Keshri, J.P., 2021. Burdigalian to early Serravallian diatom biostratigraphy from Havelock Island, Northern Indian Ocean. *Stratigraphy and Geological Correlation.* 29(2), 241-262. https://doi.org/10.1134/S0869593821020064.
12. Dey, R., Chakraborty, A., Ghosh, A.K., Saxena, S., **Roy, L.,** 2020. Marine benthic flora and associated faunal remains from the Palaeocene of Karasur Formation (Puducherry) of Cauvery Basin, southern India and their significance in deciphering palaeoecology. *Journal of the Botanical Society of Bengal,* 74(1), 68-78. (ISSN No. 0971-2976).

Book Chapters

13. Ghosh, A.K., Saxena, S., **Roy, L.**, 2025. Diversity and distribution of benthic marine calcareous algae in the Cretaceous – Palaeogene sequence of Cauvery Basin. Geology of the Cauvery Basin in South India, CRC Press Edited Book, pp. 211-222, DOI: 10.1201/9781032710488-14.
14. Ghosh, A.K., **Roy, L.,** Saxena, S., 2025. Mathematical attributes applicable on the evolution of life forms and their adaptation with changing climate in the geologic past. *Mathematical Analysis and Applications in Biological Phenomena through Modelling*, Springer, pp. 369-392, DOI: 10.1007/978-981-97-9194-1.
15. Chakraborty, A., Ghosh, A.K., Saxena, S., Dey, R., **Roy, L.**, 2023. Neogene biostratigraphy and paleoceanography of Andaman and Nicobar Basin: A reappraisal. Stratigraphy & Timescales, vol. 8, Elsevier, pp. 121-187, ISSN 2468-5178. https://doi.org/10.1016/bs.sats.2023.08.005.

Abstracts in conference volumes

1. **Roy, L.,** Ghosh, A. K., Punekar, J., Bhaumik, A. K., 2024. Pleistocene calcareous nannofossil events from the northeast Indian Ocean: Insights into palaeoclimate and sedimentation rates. National Colloquium on "29th Indian Colloquium on Micropaleontology and Stratigraphy (ICMS)", Department of Geology, University of Delhi, Delhi, 17th – 19th October, 2024.
2. **Roy, L.,** Punekar, J., Ghosh, A. K., 2024. Palaeocene-Eocene coralline red algae and green algae from the Shella Formation of East Khasi Hills, Shillong Plateau, Meghalaya, NE India. 13th International Symposium on Fossil Algae, 2nd – 6th September, 2024.
3. **Roy, L.,** Saxena, S., Ghosh, A. K., 2023. Maiden record of 9.84 to 7.39 million year old marine algae belonging to Class Dictyochophyceae from the offshore sediments of northeast Indian Ocean. International Conference on 'Advances in Plants, Microbes and Agricultural Sciences (APMAS), 2nd -4th March, 2023.
4. Saxena, S., **Roy, L.**, Ghosh, A. K., 2023. Around 7.5 million year old unicellular, pigmented, photosynthetic, flagellate, marine algae-silicoflagellates from Neil Island, Andaman and Nicobar. International Conference on 'Advances in Plants, Microbes and Agricultural Sciences (APMAS), 2nd -4th March, 2023.
5. **Roy, L.,** Ghosh, A. K., Bhaumik, A. K., Sensarma, S., 2022. Tortonian radiolarian events from Northeast Indian Ocean (NGHP-01-17A). Online International NECLIME Conference on 'Neogene climate evolution and biotic response(s), South Asia, 21st- 24th November, 2022.
6. Ghosh, A. K., **Roy, L**., Dey, R., Chakraborty, A., 2022. Benthic calcareous algae diversity during middle Miocene to Pleistocene sequences in northeast Indian Ocean: their significance in deciphering depositional environment. Online International NECLIME Conference on 'Neogene climate evolution and biotic response(s), South Asia, 21st-24th November, 2022.
7. **Roy, L.,** Ghosh, A. K., Bhaumik, A. K., Sensarma, S., 2021. Late Miocene to Pleistocene calcareous nannofossil events from northeast Indian Ocean. The Micropalaeontological Society (TMS) Annual Conference 2021, Prague, Czech Republic, 18th and 19th November, 2021.
8. **Roy, L.,** Ghosh, A. K., Bhaumik, A. K., Sensarma, S., 2021. Calcareous nannofossil events and sedimentation rate during Tortonian from northeast Indian Ocean. Online International NECLIME Conference on 'Neogene climate evolution and biotic response(s), South Asia, 7th- 9th September, 2021.
9. **Roy, L.,** Ghosh, A. K., Chakraborty, A., Bhaumik, A. K., Sensarma, S., Saxena, S., Dey, R., 2021. High biosiliceous productivity during the Tortonian - a case study of diatom assemblages from offshore and onshore sediments of the northeast Indian Ocean. Online International Diatom Symposium, 23rd - 25th August, 2021.
10. Dey, R., Chakraborty, A., Saxena, S., **Roy, L.**, Ghosh, A. K., 2019. Late middle Miocene (Serravallian) coralline red algae from Little Andaman (Hut Bay): their significance in palaeobathymetry. International Symposium on "12th International Symposium on Fossil Algae", BSIP, Lucknow, U.P., 04th - 06th November, 2019, pp. 12.
11. Saxena, S., **Roy, L.**, Chakraborty, A., Dey, R., Ghosh, A. K., 2019. Tortonian calcareous and siliceous microfossils from Sawai Bay Formation, Neil Island, India. International Symposium on "12th International Symposium on Fossil Algae", BSIP, Lucknow, U.P., 04th - 06th November, 2019, pp. 30.
12. **Roy, L.**, Ghosh, A.K., Bhaumik, A.K., Chakraborty, A., Sensarma, S., 2019. Multiple microfossil assemblages from the Serravallian of northeast Indian Ocean. National Colloquium on "XXVII Indian Colloquium on Micropaleontology and Stratigraphy", BHU, Varanasi, U.P., 04th - 06th November, 2019, pp. 211.

Conference attended

1. International Symposium on "13th International Symposium on Fossil Algae", Le Castella, Italy, 2nd - 6th September, 2024.
2. National Colloquium on "XXVII Indian Colloquium on Micropaleontology and Stratigraphy", BHU, Varanasi, U.P., 04th - 06th November, 2019.
3. International Symposium on "12th International Symposium on Fossil Algae", BSIP, Lucknow, U.P., 16th – 24th September, 2019.

Online conference/ E-training/ Lecture series/ Webinar/ Workshop attended

1. Online International NECLIME Conference on 'Neogene climate evolution and biotic response(s), South Asia, 21st- 24th November, 2022.
2. Online International "The Micropalaeontological Society" Annual Conference 2021, Prague, Czech Republic, organised by The Micropalaeontological Society, 18th - 19th November, 2021.
3. E-training on "Critical and strategic Minerals" conducted by RTD, CR, GSITI, Nagpur, 27th September- 1st October, 2021.
4. Online International NECLIME Conference on 'Neogene climate evolution and biotic response(s), South Asia' organised by Birbal Sahni Institute of Palaeosciences (BSIP), Lucknow, India, 7th -9th September, 2021.
5. Online International Diatom Symposium organised by International Society for Diatom Research, 23rd -25th August, 2021.
6. E-training on "Refresher Training on Concepts of Quaternary Mapping" conducted by RTD, CR, GSITI, Nagpur, 31st May- 4th June, 2021.
7. Workshop on "Popular Science Writing and News Reporting" organised by BSIP and Vigyan Prasar, Lucknow, U.P., 26th March, 2021.
8. Certificate for the participation in 'Women Scientist & Entrepreneurs Conclave' as part of IISF, 2020 organised by the Ministry of Science and Technology, Ministry of Earth Sciences and Ministry of Health and Family Welfare, Govt. of India in collaboration with VIBHA and CSIR, 22nd - 25th December, 2020.
9. E-training on "Basic of Structural Geology" conducted by T.C. Division of Geological Survey of India training Institute, Hyderabad, 7th - 9th September, 2020.
10. Geochron'- an online lecture series on various aspects of Geology, Presidency University, Kolkata, W.B., 22nd August- 27th September, 2020.
11. One day National Webinar on "Plant through ages: extinct to extant" organised by Department of Botany in association with the IQAC of Mrinalini Datta Mahavidyapith College, Kolkata, W.B., 4th August, 2020.