Dr. Ajoy Kumar Bhaumik's publications

Peer-Reviewed journals

1. Bar, S., Kamila, B., Pal, P. P., Bhaumik, A. K., Ghorai, S. K., 2026. Multi-Metal Competitive Adsorption on Plastic Polymers: Evidence from Single and Binary Metal Exposure Experiments. Chemosphere, 405, 144952. doi.org/10.1016/j.chemosphere.2026.144952

2. Pal, S., Bhaumik, A. K., Tikadar, S., Mahato, S. K., Pal, 2026. Coprolites and Neodiapsida remains from the Early Triassic Panchet Formation, India. Historical Biology, 1–27. https://doi.org/10.1080/08912963.2026.2654073

3. Bar, S., Sahu, R., Bhaumik, A. K., Bera, S. K., Ghorai, S. K., 2026. Microplastiglomerates as Emerging Pollutant Sinks: Characterization and Heavy Metal Retention Studies. Science of the Total Environment, 1017, 181491. https://doi.org/10.1016/j.scitotenv.2026.181491.

4. Chakraborty, P., Sen, P., Peketi, A., Mishra, S., Chakraborty, P., Kumari, J., Bhaumik, A. K., and Hazra, B., 2026. Source-specific health risks of metallic elements in road dust from coal mining affected urban areas using an integrated PMF–HHR–Monte Carlo framework. Environmental Geochemistry and Health, 48:70, https://doi.org/10.1007/s10653-025-02960-5.

5. Patrick, N. M., Vats, N., Bhaumik, A. K., Mohanty, S., Chattopadhyay, K., 2026. Plio-Pleistocene Sediment Grain Size Variability in the Western Bay of Bengal: Evidences of Indian Summer Monsoon Intensification. Marine Geology, 491, 107682. https://doi.org/10.1016/j.margeo.2025.107682

6. Vats, N., Bhaumik, A. K., Das, M., Mohanty, S., and Singh, R. K., 2025. Correspondence of ENSO-like processes to the thermocline planktic foraminifera in the East China Sea over the last 400 ka. Journal of the Palaeontological Society of India, 70(2), 384-393. DOI: 10.1177/05529360251405609.

7. Chaudhuri, S., Bose, K., Chattopadhyay, K., Das, S. S., Bhaumik, A. K., 2025.Biostratigraphy, mineralogy, and paleoenvironmental analysis of the Miocene Gaj Formation from the Dwarka Basin, western India. Geological Magazine, 162(e49): 1–24. https://doi.org/10.1017/S0016756825100356

8. 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. Deep-Sea Research Part II, 223, 105517. https://doi.org/10.1016/j.dsr2.2025.105517.

9. Srivastava, S., Vikash, V., Pal, S. K., Kumar, R., Kumar, S., Mondal, S., Bhaumik, A. K., 2025. Integrated Geophysical Approach for Bauxite Exploration in Bimarla Mine, Lohardaga, Jharkhand, India. Mining, Metallurgy & Exploration. https://doi.org/10.1007/s42461-025-01302-4.

10. Mohanty, S., Chaudhuri, S., Chattopadhyay, K., Patrick, N. M., Vats, N., and Bhaumik, A. K., 2025. Influence of Monsoon Variability on Hydrographic and Productivity Dynamics in the Western Bay of Bengal during the Late Holocene: A Planktic Foraminiferal Perspective.

Palaeogeaography, Palaeoclimatology, Palaeoecology. 670, 112971. https://doi.org/10.1016/j.palaeo.2025.112971

11. Roy, L., Ghosh, A. K., and Bhaumik, A. K., 2024. Tortonian–Messinian radiolarian events from Northeast Indian Ocean – diversity analysis, palaeogeographic distribution and depositional environment. Journal of Earth System Science. 134:32, 1-25; https://doi.org/10.1007/s12040-024-02481-2.

12. Bhaumik, A. K., Kumar, S., Chaudhuri, S., Mohanty, S., Mukherjee, M. K., Sain, K., Gupta, A. K., and Kumar, P., 2024. Accumulation of Gas Hydrates in Mass Transport Deposit at Krishna-Godavari Basin, Bay of Bengal: Foraminiferal, Sedimentological, and Seismic Evidence. AAPG Bulletin, 108(9), 1687-1703. doi.org/10.1306/03222423052.

13. Swagata Chaudhuri, Arindam Guha, Ajoy K. Bhaumik, Suparan Pathak, and Nikhil Baranval, 2024. Analysis of the spectral contrast between fossil-bearing and fossil-depleted limestone- Implication in delineating fossil-bearing limestone using reflectance and emittance spectroscopy data. Journal of the Geological Society of India, 100(7), 971-980. doi.org/10.17491/jgsi/2024/173940.

14. Roy, Lopamudra and Ghosh, Amit K and Bhaumik, Ajoy Kumar, 2024. Late Miocene radiolarian data from the sediment core of NGHP–01–17A in the Andaman and Nicobar Basin, NE Indian Ocean. Available at SSRN: https://ssrn.com/abstract=4807267 or http://dx.doi.org/10.2139/ssrn.4807267.

15. Bhaumik, A. K., Chaudhuri, S., Kumar, S., Mohanty, S., Roy, L., Ghosh, A. K., Chowdhury, S., and 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.

16. 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, 105297, ISSN 0967-0645. doi.org/10.1016/j.dsr2.2023.105297.

17. Dey, R., Basso, D., Chakraborty, A., Roy, L., Bhaumik, A. K., Ghosh, A. K., 2023. Rhodolith-forming coralline red algae in the CaCO3 biofactory – A case study from the Serravallian of tropical northeastern Indian Ocean. Comptes Rendus Palevol, 22(26), 541-567. doi.org/10.5852/cr-palevol2023v22a26.

18. Mohanty, S., Chaudhuri, S., Bhaumik, A. K., and Pankaj Kumar. 2023. Late Holocene Paleoceanographic and Climatic Changes and their Impact on Indian Socio-Economic Condition: Benthic Foraminiferal Evidence from the Bay of Bengal. The Holocene, 33(7) 791–806. doi.org/10.1177/09596836231163505.

19. Maiti, M., Bhaumik, A. K., Mandal, A., 2023. Experimental and kinetic modelling studies on the gas hydrate inhibition effect of PVP K-90 in drilling fluids. Gas Science and Engineering, 115, 205015. doi.org/10.1016/j.jgsce.2023.205015.

20. Chaudhuri, S., De, S., Srivastava, H., Chattopadhyay, K., & Bhaumik, A. K., 2022. Multiproxy analysis constraining climatic control over the Cenozoic depositional history of Kachchh, Western India. Geological Journal, 57(9), 1–33. doi.org/10.1002/gj.4511.

21. Maiti, M., Pillai, P., Sharma, A., Bhaumik, A. K., Mandal, A., 2022. Inhibition effect of synthesized Ionic liquids on hydrate formation: A kinetic and thermodynamic study. Energy & Fuels, 36 (18), 10832-10844. doi: 10.1021/acs.energyfuels.2c01921.

22. Singh, S., Gupta, A. K., Rawat, S., Bhaumik, A. K., Kumar, P., Rai, S. K., 2022. Paleomonsoonal shifts during ~13700 to 3100 yr BP in the central Ganga Basin, India with a severe arid phase at~4.2 ka. Quaternary International, 629, 65-73. doi.org/10.1016/j.quaint.2021.01.015.

23. 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. doi.org/10.47894/mpal.68.4.01.

24. Maiti, M., Bhaumik, A. K., Mandal, A., 2022. Geological characterization of natural gas hydrate bearing sediments and their influence on Hydrate formation and dissociation. Journal of Natural Gas Science and Engineering, 100, 104491, doi.org/10.1016/j.jngse.2022.104491.

25. Roy, L., Ghosh, A. K., Bhaumik, A. K., Chakraborty, A., Sensarma, S., Dey, R., and 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. doi.org/10.47894/mpal.68.1.03.

26. Maiti, M., Ranjan, R., Chaturvedi, E., Bhaumik, A. K., and Mandal, A., 2021. Formulation and characterization of water-based drilling fluids for gas hydrate reservoirs with efficient inhibition properties. Journal of Dispersion Science and Technology, 42(3), 338-351. doi.org/10.1080/01932691.2019.1680380.

27. Srivastava, H., and Bhaumik, A. K., 2021. Biostratigraphy and sea-level fluctuations during the Jurassic of Kachchh region, Gujarat, India. Journal of the Palaeontological Society of India, 66(2), 156-162. (ISSN 0552-9360).

28. Maiti, M., Bhaumik, A. K., and Mandal, A., 2021.Performance of water-based drilling fluids for deep-water and hydrate reservoirs: designing and modeling studies. Petroleum Science, 18(6), 1709-1728. doi.org/10.1016/j.petsci.2021.09.001.

29. Dey, R., Ghosh, A. K., Bhaumik, A. K., Chakraborty, A., Saxena, S., and 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. doi.org/10.2113/gsjfr.51.3.115.

30. Arindam Guha, Shovan Lal Chattoraj, Snehamoy Chatterjee, K Vinod Kumar, P.V.N. Rao, A.K. Bhaumik, 2020. Reflectance spectroscopy-guided broadband spectral derivative approach to detect glauconite-rich zones in fossiliferous limestone, Kachchh region, Gujarat, India. Ore Geology Reviews, 127, 103825, doi.org/10.1016/j.oregeorev.2020.103825.

31. Chaudhuri, S., Guha, A., Bhaumik, A. K., Pasricha, K., 2020. Potential Utility of Reflectance Spectroscopy in Understanding the Paleoecology and Depositional History of Different Fossils. Scientific Reports, 10: 16801. doi.org/10.1038/s41598-020-73719-4.

32. Singh, S., Gupta, A. K., Dutt, S., Bhaumik, A. K., Anderson, D. M., 2020. Abrupt shifts in the Indian summer monsoon during the last three millennia. Quaternary International, 558, 59-65. doi.org/10.1016/j.quaint.2020.08.033.

33. Biswas, S., and Bhaumik, A. K., 2020. Timing and cause of the disappearance of some elongated taxa in the Indian Ocean: Study from NGHP Hole 17A. Journal of Earth System Science, 129 (1), 128 (1-10), doi.org/10.1007/s12040-020-01399-9 (012345678).

34. Chowdhury, S., and Bhaumik, A. K., 2019. Palaeoceanographic changes in the Bay of Bengal during the Holocene. Journal of the Paleontological Society of India, 64(1), 61-72 (ISSN 0552-9360).

35. Srivastava, H., Bhaumik, A. K., Tiwary, D., Mohanty, S. P., and Patil, D. J., 2018. Characterisation of organic carbon in black shales of the Kachchh basin, Gujarat, India. Journal of Earth System Science, 127, (7) Article Number 93. doi.org/10.1007/s12040-018-1002-8.

36. Srivastava, H., Bhaumik, A. K., Mohanty, S., (2017). Depositional environment of intertrappean and intratrappean beds of the Anjar area in a marine environment: Foraminiferal evidence. Journal of Paleontological Society of India, 62(2), 147-156. ISSN 0552-9360.

37. Bhaumik, A. K., Paikray, J., Dutta, J., Mitra, A., Tiwari, D., and Patil, D. J. (2017). Biostratigraphy and depositional environment of the Miocene limestone bed of Baripada, Mayurbhanj District, Odisha: Foraminiferal, sedimentological and bulk organic geochemical evidences. Journal of Geological Society of India, 90, 437-446. doi.org/10.1007/s12594-017-0737-1.

38. Jyothi, V., Sain, K., Pandey, V., and Bhaumik. A. K., (2017). Seismic attenuation for characterization of gas hydrate reservoir in Krishna-Godavari basin, eastern Indian margin. Journal of the Geological Society of India, 90, 261-266. Doi.10.1007/s12040-017-0840-0.

39. Bhaumik, A. K., Kumar, S., Ray, S., Vishwakarma, G. K., Gupta, A. K., Kumar, P. and Sain, K., (2017). Stable carbon and oxygen isotope study on benthic foraminifera: implication for microhabitat preferences and interspecies correlation. Journal of Earth System Science, 126:72. doi: 10.1007/s12040-017-0840-0.

40. Das, M., Singh, R. K., Gupta, A. K. and Bhaumik, A. K. (2017). Holocene strengthening of the Oxygen Minimum Zone in the northwestern Arabian Sea linked to changes in intermediate water circulation or Indian monsoon intensity? Palaeogeography, Palaeoclimatology, Palaeoecology, 483, 125-135. doi.org/10.1016/j.palaeo.2016.10.035.

41. Bhaumik, A. K., Gupta, A. K., Clemens, S. C., and Mazumder, R. (2014). Functional morphology of Melonis barleeanum and Hoeglundina elegans: a proxy for watermass characteristics. Current Science, 106(8), 1133-1140.

42. Bhaumik, A. K., Gupta, A. K., and Ray, S., (2014). Surface and deep-water variability at Blake Ridge, NW Atlantic during the Plio-Pleistocene linked to closing of the Central American Seaway. Paleogeography, Paleoclimatology, paleoecology, 399, 345-351. doi:10.1016/j.palaeo.2014.02.001.

43. Bhaumik, A. K., Gupta, A., Gupta, A. K., Kumar, S., Ray, S., and Biswas, S., (2013), Gas hydrates occurrence, destabilization and potential energy resources: A review based on

faunal, geochemical and geophysical investigations with special reference to the Blake Ridge, NW Atlantic. Journal of the Palaeontological Society of India, 58(1), 39-50.

44. Sain, K., Gupta, H., Mazumder, A., Bhaumik, A. K., and Bhowmick, P. K., (2012). Geo-scientific Investigations of Gas-Hydrates in India. Proceedings of Indian National Science Academy, 78, 503-511 (ISSN 0370-0046).

45. Bhaumik, A. K., Gupta, A. K., Dey, R., Clemens, S. C., (2011), Stilostomella: Extinction or local disappearance of elongated species? Current Science, 101 (7), 952-958.

46. Mohan, K., Gupta, A. K. and Bhaumik, A. K., (2011), Distribution of deep-sea benthic foraminifera in the Neogene of Blake Ridge, NW Atlantic. Journal of Micropalaeontology, 30, 33-74, doi: 10.1144/0262-821X10-008.

47. Bhaumik A. K., Gupta, A. K. and Thomas, E., (2011), Blake Outer Ridge: Late Neogene Variability in Paleoceanography and Deep-sea Biota. Paleogeography, Paleoclimatology, paleoecology, 302 (3-4), 435-451, doi: 10.1016/j.palaeo.2011.02.004.

48. Bhaumik, A. K., Gupta, A. K., Mohan, K. and Singh, R. K., (2008), Disappearance of Stilostomella lepidula (Schwager) across the mid-Pleistocene transition and its paleoceanographic implication. Current Science, 94(6), 758-764.

49. Bose, T., Bhaumik, A. K., Mishra, S., (2007). Meteoritic impacts and climatic changes in Pliocene-Pleistocene epoch. Earth, Moon, and Planets, 101, 141-151, doi:10.1007/s11038-007-9190-2.

50. Bhaumik, A. K., Gupta, A. K., M. Sundar Raj, Mohan, K., De, S., and Sarkar, S. (2007). Paleoceanographic evolution of the northeastern Indian Ocean during the Miocene: evidence from deep-sea benthic foraminifera (DSDP Hole 216A). Indian Journal of Marine Sciences, 36(4), 332-341.

51. Bhaumik, A. K. and Gupta, A. K. (2007). Evidence of methane release from Blake Ridge ODP Hole 997A during the Plio-Pleistocene: Benthic foraminifer fauna and Total Organic Carbon. Current Science, 92(2), 192-199.

52. Bhaumik, A. K. and Gupta, A. K. (2005). Deep-sea benthic foraminifera from gas hydrate-rich zone, Blake Ridge, Northwest Atlantic (ODP Hole 997A). Current Science, 88(12), 1969-1973.

53. Das, M., Gupta, A. K., Singh, R. K. and Bhaumik, A. K. (2002). Significance of Stable Isotopes in paleoclimatology and Paleoceanography – A Review. Indian Journal of Geochemistry, 17, 13-23 (ISSN: 0970-9088).

Book Chapters

1. Bose, K., Chaudhuri, S., Chattopadhyay, K., Ghosh, A., Das, S. S., and Bhaumik, A. K., (2025). Miocene gastropod faunal diversity studies and community structure from the Dwarka Basin, Kathiawar Peninsula, western India. In: The Neogene Earth (Eds Ghosh, A. K., Kapur, V. V., Roy, L., Punekar, J., Thakkar. M. G.) Springer (Accepted)
2. Vats, N., Bhaumik, A. K., Patrick, N. M., Chattopadhyay, K., Mohanty, S., and Das, M., (2025). Neogene Paleoceanography and Paleoclimatic Changes in the Indian Ocean: A Foraminiferal Perspective. In: The Neogene Earth (Eds Ghosh, A. K., Kapur, V. V., Roy, L., Punekar, J., Thakkar. M. G.) Springer (Accepted)

3. Bhaumik A. K., and Gupta, A. K., (2011). Occurrence, clues, and importance of natural gas hydrates: Evidence from NW Atlantic. In New Paradigms of Exploration and Sustainable Mineral Development: Vision 2050 (Eds. Varma, O. P., Sarkar, B. C., Varma, A. K., Mukherjee, M. K., Singh, S.). 17th Convention of Indian Geological Congress and International Conference, ISM, Dhanbad, pp. 493-506.

4. Bhaumik, A. K. and Gupta, A. K. (2011). Biotic evidence of methane seepage in gas hydrate-rich marine settings. World Petrocoal Congress, New Delhi, pp. 1-14.

5. Bhaumik, A. K. and Gupta, A. K. (2010). Foraminiferal (Protozoan) signatures for gas hydrate exploration: A case study from NW Atlantic. *In* Geological and Technological Facets of CBM, Shale Gas, Energy Resources and CO_2 Sequestration (Eds. Varma, A. K., Dubey, R. K., Sarkar, B. C. and Saxena, V. K.), Allied Publishers Pvt. Ltd., New Delhi, pp.116-125.

Conference Abstracts

1. Bhaumik, A. K., Kumar, S., and Chowdhury, S., 2025. Documentation and extension of mid-depth MTD in the K-G basin: Benthic foraminiferal evidence. In: Fossils as Earth's Timekeepers, 29-31 October 2025, CSIR-National Institute of Oceanography, Goa, India.

2. Mohanty, S., and Bhaumik, A. K., 2025. Late Holocene paleoceanographic and climatic changes and their impact on Indian socio-economic condition: Benthic foraminiferal evidence from the Bay of Bengal. In: Fossils as Earth's Timekeepers, 29-31 October 2025, CSIR-National Institute of Oceanography, Goa, India.

3. Chattopadhyay, K., Mohanty S., and Bhaumik, A. K., 2025. Late Holocene Hydrographic Variability in the Western Bay of Bengal: Insights from Planktic Foraminifera. 15th International Conference on Palaeoceanography. 31st August to 5th September 2025, IISC Bengaluru India

4. Patrick, N. M., Vats, N., Mohanty S., Chattopadhyay, K., and Bhaumik, A. K., 2025. Sediment grain size variability in the Bay of Bengal over the last 5 Ma and its linkage with the Indian Summer Monsoon. 15th International Conference on Palaeoceanography. 31st August to 5th September 2025, IISC Bengaluru India

5. Mohanty S., and Bhaumik, A. K., 2025. Late Holocene Hydrographic Variability in the Western Bay of Bengal: Insights from Planktic Foraminifera. 15th International Conference on Palaeoceanography. 31st August to 5th September 2025, IISC Bengaluru India

6. Chattopadhyay, K., Chaudhuri, S., Mohanty, S., Patrick, N. M., Bhaumik, A. K., 2025. Impact of Organic Matter on Grain Size Analysis: A Comparative Experimental Study from the Mahanadi Offshore Basin, Eastern India. Abstract Volume, XV India Colloquium on Micropaleontology and stratigraphy (31 August to 5 September 2025 at IISC Bangaluru).

7. Mohanty, S., and Bhaumik, A.K., 2024. Assessing the hydrographic variability during the late Holocene using planktic foraminifera in the western Bay of Bengal, TROPQUA 2024, NIO GOA, 3-7 November, 2024.

8. Bhaumik, A. K., Kumar S., and Sain, K., 2024. Foraminifera: Clues for MTD and gas hydrate genesis. ICMS 2024/DU/14, pp. 14, in Abstract Volume of 29th Indian Colloquium on Micropaleontology and Stratigraphy, 17-19 October 2024, Department of Geology, University of Delhi.

9. Vats, N., Singh, R. K., and Bhaumik, A. K., 2024. Orbital scale synchronization of the Kuroshio Current and Gulf Stream. ICMS 2024/DU/119, pp. 122, in Abstract Volume of 29th Indian Colloquium on Micropaleontology and Stratigraphy, 17-19 October 2024, Department of Geology, University of Delhi.

10. Mohanty, S., and Bhaumik, A. K., 2024. Late-Holocene climate variability recorded from Benthic foraminifera morpho-groups in Western Bay of Bengal, India. ICMS 2024/DU/165, pp. 169, in Abstract Volume of 29th Indian Colloquium on Micropaleontology and Stratigraphy, 17-19 October 2024, Department of Geology, University of Delhi.

11. Roy, L., Ghosh, A. K., Punekar, J., and Bhaumik, A. K., 2024. Pleistocene calcareous nannofossil events from the Northeast Indian Ocean: Insights into palaeoclimate and sedimentation rates. ICMS 2024/DU/214, pp. 218, in Abstract Volume of 29th Indian Colloquium on Micropaleontology and Stratigraphy, 17-19 October 2024, Department of Geology, University of Delhi.

12. Swagata Chaudhuri, S Mohanty, A K. Bhaumik, S. S. Das., 2024. Benthic and Planktic Foraminifera: Unveiling Late Holocene Paleoclimatic and Paleoceanographic Fluctuations" Oral presentation at 3rd INQUA-MARE workshop - Tropical Realm, Costa Rica (9-11 January 2024).

13. Mohanty, S., Chaudhuri, S., Bhaumik, A. K., and Kumar, P., 2023. Holocene Climate Variability Recorded from Benthic Foraminifera Morphogroup in Western Bay of Bengal, India. Abstract ID: 14611. Session 13i: Ocean circulation, carbon and climate: Perspectives from proxies and models. Goldschmidt Conference 2023.

14. Chaudhuri, S, De, S., Srivastava, H., Chattopadhyay, K., and Bhaumik, A. K., 2023. Influence of Paleoclimate and Paleodepositional Environment on Organism's flourishing: A Case Study on the Cenozoic Sediments From the Kachchh Region, Western India. Abstract ID: 14581, Session 8d: (Bio)chemical sediments as geochemical archives through deep time - Nutrient availability and the co-evolution of Earth's oceans, atmosphere, continents, and life. Goldschmidt Conference 2023.

15. Ghosh, A. K., Roy, L., Saxena, S., Chakraborty, A., Sensrma, S., Bhaumik, A. K., 2021. Signature of high productivity during Tortonian: evidence from biosiliceous microfossils from northeast Indian Ocean. Online International NECLIME conference on "Neogene Climate Evolution and Biotic Response(S) in South Asia, Organised by BSIP, Lucknow, 7-9 September 2021.

16. Dey, R., Ghosh, A. K., Bhaumik, A. K. (2021): Impact of Radiolarians on Neil Island of Andaman and Nicobar Basin, Northeast Indian Ocean, TMS Annual Conference 2021, Prague on 18th -19th November, 2021, Czech Republic (Oral Presentation).

17. Dey, R., Ghosh, A. K., Bhaumik, A. K. (2021): WADE ratio of radiolarians: A tool for interpretation on the palaeoecology of Neogene sediments from Andaman and Nicobar Basin, Online International NECLIME conference on "Neogene Climate Evolution and Biotic Response(s) in South Asia", 7-9 September, 2021, organized by Birbal Sahni Institute of Palaeosciences, Lucknow (Oral Presentation).

18. Chowdhury, S., Behera, T., Chaudhuri, S., and Bhaumik., 2019. Quaternary calcareous nannofossil biostratigraphy from NGHP Hole 3B, Krishna-Godavari basin, Bay

of Bengal" presented at 12th International Symposium on Fossil Algae at BSIP, Lucknow.

19. Dey, R., Ghosh, A. K., Bhaumik, A. K. and Chakraborty, A. (2019). Late Pliocene to early Pleistocene Planktonic foraminifera from Northern Indian Ocean (Andaman and Nicobar Islands): Interpretation on Glaciations Episode, Upwelling Cold Current and Palaeoecology. XXVII Indian colloquium on "Micropaleontology and Stratigraphy" BHU, Varanasi, U.P., 4th – 6th November, 2019, pp. 210 (Poster Presentation).

20. Chaudhuri, S., Bhaumik, A. K., Sain, K., 2019. Gas hydrate geochemistry - origin and gas hydrate distribution in Mahandi offshore basin, Eastern India" Presented - ePoster at 2nd InternationalCongress on Earth Sciences.

21. Hema Srivastava, Ajoy K. Bhaumik and Sarada P. Mohanty, 2018. Characterization of Black shales of Kachchh Basin and its hydrocarbon generation potentiality. In: Emerging Trends in Geophysical Research for Make-In-India, organized by the Department of Applied Geophysics, IIT(ISM) Dhanbad, 9-10 March 2018.

22. Bhaumik, A. K., 2018. 'Microfossils in gas hydrate exploration'. Emerging Trends in Geophysical Research for Make in India, Department of Applied Geophysics, Indian Institute of Technology (Indian School of Mines), Dhanbad, India, March 9-11, 2018, pp. 63-64.

23. S Singh, AK Gupta, S Dutt, A K Bhaumik, 2018. Paleoclimate variability in the NW Himalaya over the past three millennia. EGU General Assembly 2018, v20, pp. 161.

24. Mohanty, S., Bhaumik, A. K., 2017. Bay of Bengal oceanographic changes during the last 300 years related to monsoonal variation. Abstract Book of 1st International Congress on Earth Sciences, Bandar Seri Begawan, Brunei Darussalam, held during 14-18 Nov, 2017, PP. 46-47.

25. Chaudhuri, S., Bhaumik, A. K., and Chowdhury, S., 2017. Landsat satellite imagery: A new informative source in the palaeontological study: Case study of Mahanadi Basin, Odisha, south eastern India. Abstract Book of 1st International Congress on Earth Sciences, Bandar Seri Begawan, Brunei Darussalam, held during 14-18 Nov, 2017, PP. 111.

26. Srivastava, H., and Bhaumik, A. K., 2017. The Eocene depositional history and stratigraphy of Kutch Basin, India: Nannofossils and foraminiferal evidences. Abstract Book of 1st International Congress on Earth Sciences, Bandar Seri Begawan, Brunei Darussalam, held during 14-18 Nov, 2017, PP. 54.

27. Srivastava, H., and Bhaumik, A. K., 2017. Depositional environment of sedimentary sequences in Matanomadh area, western Kutch: Foraminiferal evidences. Abstract volume of ICMS XXVI, Department of Geology, University of Madras, Chennai, 17th to 19th August, 2017, pp. 87-88.

28. Chowdhury, S., and Bhaumik, A. K., 2017. Paleoceanographic changes of Bay of Bengal during the Holocene. Abstract volume of ICMS XXVI, Department of Geology, University of Madras, Chennai, pp. 26-27.

29. Bhaumik, A. K., Gupta, A. K., and Ray, S., 2017. Closing of the Panamanian Seaway: timing and effects. Abstract volume of ICMS XXVI, Department of Geology, University of Madras, Chennai, pp. 5-6.

30. Bhaumik, A. K., and Ray, S., 2017. Benthic foraminifera and its stable isotopes: indicator for development of oxygen minimum zones along the hydrocarbon rich Peru Offshore or

methane release? Abstract volume of GeoCon2017, Application of Scanning Electron Microscope (SEM) in Geosciences, Department of Geology, University of Calcutta, 27-28, May, 2017.

31. Srivastava, H., and Bhaumik, A. K., 2016. Fluvial and marine intertrappeans of Anjar: Foraminiferal evidences. Abstract Volume of Seminar on developments in geosciences in the past decades-Emerging trends for the future and impact on society and 58th AGM of the Geological Society of India. 21-23rd October, 2016, Department of Geology and Geophysics, IIT, Kharagpur, pp. 430.

32. Srivastava, H., and Bhaumik, A. K., 2016. Fluvial and marine intertrappeans of Anjar: Foraminiferal evidences. Abstract Volume of Seminar on developments in geosciences in the past decades-Emerging trends for the future and impact on society and 58th AGM of the Geological Society of India. 21-23rd October, 2016, Department of Geology and Geophysics, IIT, Kharagpur, pp. 430.

33. Bhaumik, A. K., and Ray, S., 2016. Oxygen Minimum Zone formation and basin evolution along the Offshore Peru: Benthic foraminiferal and isotopic evidences. Abstract Volume of Seminar on developments in geosciences in the past decades-Emerging trends for the future and impact on society and 58th AGM of the Geological Society of India. 21-23rd October, 2016, Department of Geology and Geophysics, IIT, Kharagpur, pp. 89.

34. Ray, S., and Bhaumik, A. K., (2013). Methane flux in Peru Offshore region. Abstract volume of XXIV ICMS, WIGH, Dehradun, 18-20 November, 2013, pp. 120.

35. Bhaumik, A. K., Gupta, A. K., Clemens, S. C., and Mazumder, R.., (2013). Watermass controlled morphological changes in benthic foraminifera. Abstract volume of XXIV ICMS, WIGH, Dehradun, 18-20 November, 2013, pp. 13.

36. Bhaumik, A. K., (2013). Disappearance of *Stilostomella lepidula* during Mid Pleistocene Transition. Annual General Meeting of the Geological Society of India and International Conference on Future Trends for Energy and Mineral Resources (ESEMR-2013), Department of Applied Geology, ISM, Dhanbad, 14-16th November, 2013, pp. 263.

37. Bhaumik, A. K., Kumar, S., and Kumar, P. (2013). Distribution of benthic foraminifera at gas hydrate rich zone in Krishna-Godavari Basin. 18th Convention of Indian Geological Congress and International Symposium on Minerals and Mining in India-The way forward, inclusive of cooperative mineral-based industries in SAARC countries. Organized jointly with Madhya Pradesh Council of Science and Technology, Bhopal, April 27-29, 2013, Pre Convention Volume, pp-45.

38. Bhaumik A. K., and Gupta, A. K., (2011). Occurrence, clues and importance of natural gas hydrates: Evidence from NW Atlantic. In New Paradigms of Exploration and Sustainable Mineral Development: Vision 2050 (Eds. Varma, O. P., Sarkar, B. C., Varma, A. K., Mukherjee, M. K., Singh, S.). 17th Convention of Indian Geological congress and International Conference, ISM, Dhanbad, pp. 493-506.

39. Bhaumik, A. K. and Gupta, A. K. (2011). Biotic evidence of methane seepage in gas hydrate rich marine settings. World Petrocoal Congress, New Delhi.

40. Bhaumik, A. K. and Gupta, A. K. (2010). Foraminiferal (Protozoan) signatures for gas hydrate exploration: A case study from NW Atlantic. National Conference cum workshop on

Geological and Technological facets of CBM, Shale Gas, Energy Resources and CO_2 sequestration CSECS 2010, ISM, Dhanbad.

41. Bhaumik, A. K. and Gupta, A. K. (2008). Analysis of Semi-Steady State Productivity of a Hyadraulically Benthic Foraminiferal and Geochemical Evidence for the Formation and Destabilization of Gas Hydrate at Blake Ridge Plateau, NW Atlantic. Geo India 2008, Greater Noida, New Delhi.

42. Bhaumik, A. K., Gupta, A. K. (2007). Use of Benthic foraminifera as proxy for gas hydrate accumulation and its destabilization: Observations from Blake Ridge. Abstract volume of XXI Indian Colloquium on Micropalaeontology & Stratigraphy, Pp-17.

43. Bhaumik, A. K., Gupta A. K. (2007). Benthic foraminiferal and geochemical evidences of gas hydrate formation and destabilization from Blake Outer Ridge, NW Atlantic. ICP IX Program and Abstracts, Pp-33.

44. Bhaumik, A. K., Gupta, A. K., Sundar Raj, M. and Mohon, K. (2005). Why were gas hydrates accumulated in the Blake Ridge Plateau. Abstracts, International Symposium on Applied Geochemistry in the evaluation and management of onshore and offshore geo-resources, Pp-4.

45. Bhaumik, A. K. and Gupta, A. K. (2004). Origin of gas hydrates at ODP Site 994, Hole C, Leg 164, Blake Ridge: Evidence from benthic foraminiferal and geochemical data. ICP VIII Program and Abstracts, Pp-79.

46. Bhaumik, A. K. and Gupta, A. K. (2003). Benthic foraminiferal and geochemical evidences for gas hydrate formation in the upper gas hydrate zone at Site 994C, Leg 164, Blake Ridge, NW Atlantic. Abstract Volume, XIX India Colloquium on Micropaleontology and stratigraphy. Pp-4.