Curriculum Vitae

NAME : **DR. BIPLAB BHATTACHARYA**

PRESENT DESIGNATION : **Professor**

NATIONALITY : **Indian**

CONTACT DETAILS : **Department of Earth Sciences**
Indian Institute of Technology Roorkee
Roorkee, Uttarakhand, India – 247667.

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TEACHING EXPERIENCE

Total 20 years (12 years 02 months in I.I.T. Roorkee)

2005-2012 – Assistant Professor in West Bengal Education Service (WBES)

23 Jan. 2013 – 21 Dec. 2018 – Assistant Professor at I.I.T. Roorkee

22 Dec. 2018 – 08 Aug. 2024 – Associate Professor at I.I.T. Roorkee

09 Aug. 2024 – till date – Professor at I.I.T. Roorkee

SUBJECTS OF INTEREST : **Sedimentology, Sequence Stratigraphy, Ichnology, Basin analysis**

EDUCATION

Qualification	University/Board	Year	Class	Remarks
Ph.D. (Sedimentology)	Calcutta University	2010	--	--
M.Sc. in Geology	Burdwan University	2000	I	Ranked 1st
B.Sc. in Geology	Burdwan University	1997	I	--

RECOGNITIONS

i) **Shortlisted in Top 10 for "Outstanding Teacher Award" (PG Category) of IIT Roorkee in successive five years - 2018, 2019, 2020, 2021, and 2022**

Average (last 05 years) Faculty Score: 4.8 (PG level), 4.0 (UG Level) in scale of 5.0

ii) Selected for **INSA International Bi-lateral Exchange Programme-2018,** visited Poland.

iii) Awarded with **ASEM-DUO Fellowship** for bilateral cooperation in **October 2019**.

iv) **"Young Sedimentologist Award–2010"** by the Indian Association of Sedimentologists (IAS)

RESEARCH

Ph.D. Thesis Supervision : **Awarded – 06**, **Ongoing – 08**

Master's Thesis Supervision : M. Tech – 17 (Completed) M. Sc. – 16 (Completed) + 04 (ongoing)

PDF Supervision : 01 N-PDF (DST-SERB) *(Ms. Udita Bansal, 2017-2019)*

Publications ***(Peer Reviewed)*** : **Total – 45 (International – 23, National – 22)**

Sponsored Research Projects : **Completed – 07 (in IITR)** **Total Grant ~Rs. 167 Lakh as PI**

Project type	Agency	Cost (Rs.)	PI/Co-PI	Duration / Status	
EMR Project	**BRNS-DAE**	20.47 L	**PI**	2020-2023	**~Rs. 122.26 Lakh as Associate Professor at IITR**
EMR Project	**MOES**	55.57 L	**PI**	2020-2023	
EMR Project	**SERB-DST**	25.86 L	**PI**	2019-2022	
EMR Project	**CSIR**	20.36 L	**PI (single)**	2018-2021	
PAN IIT –ONGC Collaboration	ONGC	16.56 L	PI (single)	2017-2019	***~Rs. 44.91 Lakh as Assistant Professor at IITR***
FIG Scheme	I.I.T. Roorkee	9.50 L	PI (single)	2013-2016	
Fast Track for Young Faculty	SERB-DST	18.85 L	PI (single)	2012-2015	

Significant Outreach activities

Research Collaborations	**International**	**i. Prof. Alfred Uchman, Jagiellonian University, Krakow, Poland** **ii. Prof. Michael Wagreich, University of Vienna, Vienna, Austria**
	National	iii. I.I.T. (ISM), Dhanbad iv. Presidency University, Kolkata v. Techno India University, Kolkata vi. Tata Steel Limited
	Industrial	vii. ONGC, GSI, AMD (BRNS, DAE), Tata Steel Ltd. in terms of Research Projects, supervision of officials for Ph.D. and /or joint publications

Administrative Responsibility	**CHAIRPERSON, DEPARTMENT RESEARCH COMMITTEE (DRC), ESD (2021-2023)**
	Member, Institute Research Committee (IRC), IIT Roorkee (2021-2023)
	Member, SRIC Committee, I.I.T. Roorkee, since 2021
	OC, SEDIMENTOLOGY LAB, ESD : Established setup for Petrographic and Ichnologic study
	OC, EXAMINATION, ESD: 2018 – 2020; OC, TIME TABLE, ESD: 2014-2016
	Faculty Advisor of IV year Int. Geological Technology course
	Member of DRC (03 terms), DAC (03 terms), DAPC (02 terms), DFSC (2020-21), Grade Moderation Committee (03 times), Ph.D. Selection Committee (04 times), SRC (of 10 students)

Important Achievements	i. Invited Speaker at International Symposium **HiPeR-2018, Hiroshima University, Japan**
	ii. Member of **Editorial Board** of Journal of Indian Geological Congress.
	iii. Member of **Governing Council**, Indian Association of Sedimentologists, 2016-2023.
	iv. Invited as **"Subject Expert"** for training of Executives of **Oil and Natural Gas Corporation Ltd. (ONGC),** organized by **Geological Survey of India (GSI),** at FTC-Kuju, Jharkhand, during 27-29 December, 2017
	v. **First rank in M.Sc. Geology** in the University of Burdwan

Teaching courses	i) Sedimentology and Stratigraphy (ESN-531) at M.Sc. level ii) Sedimentology (ESN-202) at Int. M.Tech (GT) 2nd yr. iii) Advanced Stratigraphy (ESN-342) at Int. M.Tech. (GPT) 3rd yr. iv) Sequence stratigraphy (ESN-902) as Pre-PhD course

Research contributions highlight:

The main research interests confine to the high-resolution sequence stratigraphic study with aim to understand and reconstruct the paleoenvironment, paleoclimate and paleogeographic changes of Indian Phanerozoic basin-fill successions using sedimentological, ichnological, and geochemical proxies, particularly from the Permian Lower Gondwana successions, late Crertaceous successions of theNarmada Valley basins, and the Paleocene-Eocene hydrocarbon source-reservoir rock successions of the Cambay Basin in peninsular India.

The research work involves state-of-the-art facies analysis, ichnofabric and ichnofacies analysis, bulk geochemical studies of the siliciclastic and carbonate rocks, biostratigraphy, and integration of all inputs into the framing of high-resolution (3rd/4th/5th order) sequence stratigraphic model of the basin-fill succession to decipher the chronological attributes of tectono-sedimentary events in the frame of paleoclimatic, paleoenvironmental and paleogeographic changes.

List of publications: *(corresponding author is marked with *)*

Google Scholar citations – 696, with *h-index*=16 and *i10-index* = 24
https://scholar.google.com/citations?user=mm63kOgAAAAJ&hl=en

Researchgate profile: *https://www.researchgate.net/profile/Biplab-Bhattacharya-2*

(Total publications in Web-of-Science Q1/Q2 journals = 22)

2025

1) M. Banerjee, ***Biplab Bhattacharya**, A. Bhattacharya, A. Pathak, P. P. Banerjee (2025): Geochemistry of shales of Middle Permian Barren Measures Formation, West Bokaro Basin, India: Implications on provenance, paleodepositional and paleoclimatic conditions. ***Journal of Paleogeography (Elsevier)***, 14(1), 40-65. https://doi.org/10.1016/j.jop.2024.08.011. ***(Web-of-Science (WoS) - Q1; Impact Factor – 2.5).***

2) P. Mondal, A. Das, ***Biplab Bhattacharya**, K. Halder (2025): Palaeoenvironmental implications of a turritelline-dominated assemblage from Upper Cretaceous carbonate rocks of Narmada Basin, India. ***Palaeoworld (Elsevier)***, 34(1), 100855. https://doi.org/10.1016/j.palwor.2024.06.003. ***(Web-of-Science (WoS) - Q1; Impact Factor – 1.8).***

2024

3) A. Mall, ***Biplab Bhattacharya*** (2024): Significance of a Mesoproterozoic tide-reworked fan delta – tidal flat transition: A transgressive-regressive model. ***Marine and Petroleum Geology (Elsevier)***, 162, Article No. 106755, 1-17, https://doi.org/10.1016/j.marpetgeo.2024.106755. ***(Web-of-Science (WoS) - Q1; Impact Factor – 5.361)***

4) A. Pathak, ***Biplab Bhattacharya**, M. Banerjee, A. Bhattacharya (2024): Sequence stratigraphic reappraisal of the nature of transition between two lithostratigraphic units (formations) – A study from the Permian Lower Gondwana succession, West Bokaro Basin, Eastern India. ***Marine and Petroleum Geology (Elsevier)***, 162, Article No. 106749, 1-15. https://doi.org/10.1016/j.marpetgeo.2024.106749. ***(Web-of-Science (WoS) - Q1; Impact Factor – 5.361)***

5) ***Biplab Bhattacharya**, P. Mondal (2024): Stratigraphy and palaeoenvironment of the Cretaceous deposits of Narmada Valley, central India. ***Proceedings of the Indian National Science Academy (Springer)***, 90(1), 1-10. https://doi.org/10.1007/s43538-024-00268-z. ***(Impact Factor – 0.9)***

2023

6) *A. Uchman, ***Biplab Bhattacharya***, A. Saha (2023): Gastropod grazing traces (incipient *Radulichnus* isp.) in the Godavari River, India and their preservation potential in the fossil record. ***Paleontological Research (Transactions and Proceedings of the Palaeontological Society of Japan),*** 27(4), 436-440. ***(Impact Factor – 0.9)***

7) A. Saha and ***Biplab Bhattacharya*** (2023): Controls of allogenic factors on the development of fluvial sequence stratigraphic architecture: A case study. ***Journal of Earth System Sciences (Springer)***, 132, Article No. 25. https://doi.org/10.1007/s12040-022-02038-1. ***(Impact Factor – 1.9)***

8) D. K. Phaye and ***Biplab Bhattacharya*** (2023): Organofacies and Source evaluation of Cambay Shale Formation to assess unconventional hydrocarbon potential in Jambusar-Broach area, Cambay Basin, India. ***Journal of Earth System Sciences (Springer)***, 132, Article No. 155. https://doi.org/10.1007/s12040-023-02161-7. ***(Impact Factor – 1.9)***

9) S. Naskar, *H. N. Bhattacharya and **Biplab Bhattacharya*** (2023): Channel characteristics in a growing tidal flat, Talsari, Odisha, India. ***Journal of Earth System Sciences (Springer)***, 132, Article No. 158. https://doi.org/10.1007/s12040-023-02182-2. ***(Impact Factor – 1.9)***

2022

10) H. Varshney and *__Biplab Bhattacharya__ (2022): Implications of Late Palaeozoic postglacial marine transgressive-regressive (T-R) cycles recorded in the Talchir Formation, Son Valley Basin, peninsular India: A sequence stratigraphic paradigm. ***Geological Journal (Wiley),*** 58, 333-355, https://doi.org/10.1002/gj.4596. ***(Web-of-Science (WoS) - Q2; Impact Factor – 2.12)***

11) A. Saha and *__Biplab Bhattacharya__ (2022): Controls on near-surface and burial diagenesis of a syn-rift siliciclastic rock succession: A study from Permian Barren Measures Formation, Southern India. ***Sedimentary Geology (Elsevier)***, 436, Article No. 106170. https://doi.org/10.1016/j.sedgeo.2022.106170. ***(Web-of-Science (WoS) - Q1; Impact Factor – 3.32)***

12) ***Biplab Bhattacharya**, P. P. Banerjee, P. Roy, (2022): Implications of marine Gastropoda *Baylea* DeKoninck, 1883 from the Permian Barren Measures Formation, Lower Gondwana, West Bokaro Basin, eastern India. ***Journal of Earth System Sciences (Springer),*** 131, Article No. 208. https://doi.org/10.1007/s12040-022-01950-w. ***(Impact Factor – 1.9)***

13) A. Saha, S. Chakrabarty, *__Biplab Bhattacharya__ (2022): Evidence of the Permian marginal marine sedimentation recorded in sub-surface drill cores, Lower Gondwana successions, southern India. ***Journal of Earth System Sciences (Springer),*** 131 (2), Article No. 134. ***(Impact Factor – 1.9)***

2021

14) *D. K. Phaye, __Biplab Bhattacharya__, S. Chakrabarty (2021): Heterogeneity characterization from sequence stratigraphic analysis of Paleocene-Early Eocene Cambay Shale formation in Jambusar-Broach area, Cambay Basin, India. ***Marine and Petroleum Geology (Elsevier),*** 128, Article No. 104986. https://doi.org/10.1016/j.marpetgeo.2021.104986. ***(Web-of-Science (WoS) - Q1; Impact Factor – 5.361)***

15) ***Biplab Bhattacharya,** J. Bhattacharjee, S. Banerjee, T. Roy, S. Bandyopadhyay (2021): Palaeogeographic implications of ichnotaxa assemblages from early Permian fluvio-marine Barakar Formation, Raniganj Basin, India. ***Journal of Earth System Sciences (Springer)* 130,** Article No. 12. https://doi.org/10.1007/s12040-020-01522-w. ***(Impact Factor – 1.9)***

16) ***Biplab Bhattacharya,** K. Halder, S. Jha, P. Mondal and R. Ray (2021): Stratigraphy, Sedimentology and Paleontology of Late Cretaceous Bagh Beds, Narmada Valley, Central India: A Review. *In: Mesozoic Stratigraphy of India*, Society of Earth Scientists Series, Springer Nature Switzerland AG, pp. 623-657. https://doi.org/10.1007/978-3-030-71370-6_21.

2020

17) ***Biplab Bhattacharya,** S. Jha and P. Mondal (2020): Palaeogeographic reconstruction of a fluvio-marine transitional system in Narmada rift basin, India — Implications on Late Cretaceous global sea-level rise**.** ***Journal of Palaeogeography (Springer)***, 9, Article No, 30. https://doi.org/10.1186/s42501-020-00078-6. ***(Web-of-Science (WoS) - Q1; Impact Factor – 2.9)***

18) ***Biplab Bhattacharya** and A. Saha (2020): Large soft-sediment deformation structures (SSDS) in the Permian Barren Measures Formation, Pranhita-Godavari Valley, India:Potential link to syn-rift palaeoearthquake events. ***Journal of Palaeogeography (Springer)***, 9, Article No. 14. https://doi.org/10.1186/s42501-020-00063-z. ***(Web-of-Science (WoS) - Q1; Impact Factor – 2.9)***

19) *S. Banerjee, P. Ghosh, R. Nagendra, Biplab Bhattacharya, B. Desai, A. K. Srivastava (2020): Marine and fluvial sedimentation including erosion and sediment flux in peninsular Indian Phanerozoic basins. ***Proceedings of the Indian National Science Academy (Springer)***, 86 (1), 351-363. (Impact Factor – 0.9).

20) *H. N. Sinha, R. Roy, **Biplab Bhattacharya**, O. Saha, D. P. Singh, P. P. Banerjee, B. Kumar, S. K. Sinha, B.A. Kumar (2020): Glacial to Post-Glacial fluvio-marine sedimentation system: Evidences from West Bokaro Coalfield. – Field Trip Guide. 36th International Geological Congress (IGC), Geological Survey of India, New Delhi, ES009, pp. 1-40.

2019

21) ***Biplab Bhattacharya**, Malini Chakraborty, Sunil K. Sharma (2019): Occurrence of tidalites in the Mesoproterozoic subtidal-intertidal flat, Lalsot sub-basin, North Delhi Fold Belt, Rajasthan, India. In "Geological Evolution of Precambrian Indian Shield" edited Book under SES Series (of The Society of Earth Sciences), Springer, 609-627.

2018

22) S. Jaiswal, ***Biplab Bhattacharya** and S. Chakrabarty (2018): High resolution sequence stratigraphy of Middle Eocene Hazad Member, Jambusar-Broach Block, Cambay Basin, India. ***Marine and Petroleum Geology (Elsevier),*** vol. 93, 79-94. ***(Web-of-Science (WoS) - Q1)***

23) ***Biplab Bhattacharya**, J. Bhattacharjee, S. Banerjee, S. Banerjee, K. Adhikary (2018): Early Permian transgressive-regressive cycles: sequence stratigraphic reappraisal of the coal-bearing Barakar Formation, Raniganj Basin, India. ***Journal of Earth System Sciences***, 127, 29.

24) J. Bhattacharjee, K. K. Ghosh, ***Biplab Bhattacharya** (2018): Petrography and geochemistry of sandstone-mudstone from Barakar formation (early Permian), Raniganj basin, India: implications for provenance, weathering and marine depositional conditions during Lower Gondwana sedimentation. ***Geological Journal (Wiley)***, 53, 1102-1122. ***(Web-of-Science (WoS) – Q2)***

25) S. Jaiswal and ***Biplab Bhattacharya** (2018): Characterization of middle Eocene tide-influenced delta: a study from core samples of Hazad Member, Ankleshwar Formation, South Cambay Basin, India***. Journal of Earth System Science***, 127(65), https://doi.org/10.1007/s120 40 -018-0966-8.

2017

26) S. Jha, ***Biplab Bhattacharya** and S. Nandwani (2017): Significance of seismites in the late Cretaceous transgressive Nimar Sandstone succession, Son-Narmada rift valley, Central India. ***Geological Journal (Wiley)***, 52, 768-783. ***(Web-of-Science (WoS) – Q2)***

2016

27) ***Biplab Bhattacharya**, J. Bhattacharjee, S. Banerjee, S. Bandyopadhyay and R. Das (2016): Seismites in Permian Barakar Formation, Raniganj Basin, India: Implications on Lower Gondwana basin evolution. ***Arabian Journal of Geosciences (Springer)***, 9(4), Article 300, 1-13.

28) ***Biplab Bhattacharya**, S. Banerjee and S. Bandyopadhyay (2016): Glossifungites ichnofabric signifying Crustacean colonization in early Permian Barakar Formation, Talchir Coal Basin, India. ***Current Science***, 110(1), 86-91.

2015

29) *H. N. Bhattacharya and **Biplab Bhattacharya** (2015): Lithofacies architecture and paleogeography of late Paleozoic glaciomarine Talchir Formation, Raniganj Basin, India. ***Journal of Palaeogeography (Elsevier),*** vol. 4(3), 269-283. ***(Web-of-Science (WoS) - Q1)***

30) ***Biplab Bhattacharya** and P.P. Banerjee (2015): Record of Permian Tethyan transgression in eastern India: A reappraisal of the Barren Measures Formation, West Bokaro Coalfield. ***Marine and Petroleum Geology (Elsevier)***, 67, 170-179. https://doi.org/10.1016/j.marpetgeo.2015.05.008 ***(Web-of-Science (WoS) - Q1)***

31) *H. N. Bhattacharya, **Biplab Bhattacharya**, A. Roy and S. Pal (2015): Late Archaean tidalites from western margin of Chitradurga greenstone belt, southern India. ***Precambrian Research (Elsevier)***, 257, 109-113. ***(Web-of-Science (WoS) - Q1)***

2014

32) ***Biplab Bhattacharya** and S. Jha (2014): Late Cretaceous diurnal tidal system: a study from Nimar Sandstone, Bagh Group, Narmada Valley, Central India. ***Current Science***, vol. 107, No. 6, pp. 1032-1037.

Before 2013 (Before joining IIT Roorkee)

33) ***Biplab Bhattacharya**, S. Bandyopadhyay, S. Mahapatra and S. Banerjee (2012): Record of tide-wave influence on coal-bearing Permian Barakar Formation, Raniganj Basin, India. ***Sedimentary Geology (Elsevier)***, vol. 267-268, pp. 25-35. ***(Web-of-Science (WoS) - Q1)***

34) **Biplab Bhattacharya** and *H. N. Bhattacharya (2012): Implications of mud-clast conglomerates within late Paleozoic Talchir glaciomarine succession, Talchir Gondwana Basin, India. ***Indian Journal of Geosciences***, vol. 66(1), pp. 69-78

35) *H. N. Bhattacharya and **Biplab Bhattacharya** (2011): Sole marks in storm beds from a glacially influenced late Paleozoic shallow sea, Talchir Formation, Talchir Basin, India. ***Indian Journal of Geosciences*** , vol. 65(3), pp. 175-188.

36) *H. N. Bhattacharya and **Biplab Bhattacharya** (2010): Soft-sediment deformation structures from an ice-marginal storm-tide interactive system, Permo-Carboniferous Talchir Formation, Talchir Coalbasin, India. ***Sedimentary Geology (Elsevier)***, vol. 223, pp. 380–389. ***(Web-of-Science (WoS) - Q1)***

37) *H. N. Bhattacharya and **Biplab Bhattacharya** (2010): Glacier overriding related soft-sediment deformation structures from Late Paleozoic Talchir Formation, Talchir Coalbasin, Orissa, India. ***Vistas in Geological Research, U. U. Spl. Publ. in Geology***, vol.9, pp. 18-27.

38) *H. N. Bhattacharya, **Biplab Bhattacharya** and A. Chakraborty (2009): Architecture of Storm Event Beds from Late Paleozoic Glaciomarine Talchir Formation, Talchir Coalfield, Orissa. ***Vistas in Geological Research, U. U. Spl. Publ. in Geology***, vol.8, pp. 1-10.

39) **Biplab Bhattacharya** and *H. N. Bhattacharya (2007): Implications of trace fossil assemblages from Late Paleozoic glaciomarine Talchir Formation, Raniganj Basin, India. ***Gondwana Research (Elsevier)***, vol. 12, pp. 509-524. ***(Web-of-Science (WoS) - Q1)***

40) *H. N. Bhattacharya, **Biplab Bhattacharya** and A. Chakraborty (2007): Crustacean burrow fills as obstacles for current crescents in Permo-Carboniferous Talchir Formation, Raniganj Basin, India. ***Journal of the Geological Society of India (Springer)***, vol. 69, pp. 1267-1270.

41) *H. N. Bhattacharya and **Biplab Bhattacharya** (2006): A Permo-Carboniferous Tide-Storm Interactive System: Talchir Formation, Raniganj Basin, India. ***Journal of Asian Earth Sciences (Elsevier)***, vol. 27, pp. 303–311. ***(Web-of-Science (WoS) - Q1)***

42) *H. N. Bhattacharya and **Biplab Bhattacharya** (2005): Storm Event Beds in A Paleoproterozoic Rift Basin, Aravalli Supergroup, Rajasthan, India. ***Gondwana Research (Elsevier)***, vol. 8, no. 2, pp. 231–239. ***(Web-of-Science (WoS) - Q1)***

43) *H. N. Bhattacharya, A. Chakraborty and **Biplab Bhattacharya** (2005): Significance of transition between Talchir Formation and Karharbari Formation in Lower Gondwana basin evolution – A study in West Bokaro Coal Basin, Jharkhand, India. ***Journal of Earth System Sciences (INSA)***, vol. 114, no. 3, pp. 275–286.

44) *H. N. Bhattacharya, **Biplab Bhattacharya**, I. Chakraborty and A. Chakraborty (2004): Sole marks in Storm Event Beds in the Permo-Carboniferous Talchir Formation, Raniganj Basin, India. ***Sedimentary Geology (Elsevier)***, vol. 166, pp. 209–222. ***(Web-of-Science (WoS) - Q1)***

45) ***Biplab Bhattacharya** (2003): Storm Event Beds in Talchir Formation, Jayanti Basin, Jharkhand, India. ***Indian Journal of Earth Sciences***, vol. 30, pp. 37-41.