Curriculum vitae

DR. HARSHITA BHATIA

Research Associate
Birbal Sahni Institute of Palaeosciences
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RESEARCH INTERESTS

- Understanding the changing pattern of vegetation-climate relationship during the Cenozoic.
- Angiosperm evolution, diversification, and distribution.
- Monsoon evolution and intensification during the Cenozoic.

EDUCATION

Level	Year	School/University	Subjects	%Marks
Ph.D.	2020- 2024	Birbal Sahni Institute of Palaeosciences and Academy of Scientific and Innovative Research	Biological Sciences (Palaeosciences)	-
Birbal Sahni Research Scholar	2019- 2022	Birbal Sahni Institute of Palaeosciences, 53-University Road, Lucknow	Paleobotany and Paleoclimatology	-
Post- Graduation (M.Sc.)	2016- 2018	Banaras Hindu University, Varanasi-221005	Botany	91.7%
Graduation B.Sc. (Hons.)	2013- 2016	Banaras Hindu University, Varanasi-221005	Botany	85.0%
Intermediate (10+2) (CBSE Board)	2011	BBL Public School, Bareilly, UP-243003	Physics, Chemistry, Biology, English, Mathematics	78.2%
High School (10 th) (ICSE Board)	2009	St. Francis School, Ramnagar, Varanasi, UP- 221008	English, Hindi, Science, Mathematics, Environmental Science, Social Science, Computer Applications	84.85%

ACADEMIC ACHIEVEMENTS

- Birbal Sahni Research Associate (March 2025-continuing) from the Birbal Sahni Institute of Palaeosciences, Lucknow.
- SHARDA CHANDRA GOLD MEDAL-2020 for the best original published contribution on Indian material by The Paleontological Society of India, Lucknow.
- Birbal Sahni Research Scholarship (2019-2022) from the Birbal Sahni Institute of Palaeosciences, Lucknow.
- GOLD MEDAL in M.Sc. Botany from Banaras Hindu University, Varanasi for securing highest percentage of marks.
- GATE-2019.

THESIS TITLE

Advent of monsoonal climate and evolution of evergreen forest in South Asia:
 evidence from Oligocene flora of northeast India.

Ph.D. SUPERVISOR

Dr. Gaurav Srivastava (Scientist-E), Birbal Sahni Institute of Palaeosciences,
 Lucknow

ACADEMIC SKILLS

- Quantitative paleoclimate reconstruction
- Plant systematics
- Angiosperms wood anatomy
- Palm wood anatomy
- Numerical taxonomy
- Cuticular analysis

PROFESSIONAL SKILLS

Statistical analysis

- Canonical Correspondence Analysis (CCA)
- Cluster Analysis (CA)
- Principal Component Analysis (PCA)

Softwares

- R Programming
- Origin
- ArcGIS
- Photoshop
- Corel Draw
- MS Office, Excel, Spreadsheet, PowerPoint

EXTRA CURRICULAR

- Two Years Diploma in English Language from BHU, Varanasi-221005.
- Joined National Service Scheme (NSS) for 2 Years.
- NIELIT Certificate course in Computer Application.

PUBLICATIONS

Number of publications: 27

Cumulative impact factor: 72.7

Citations: 144 (Google Scholar)

H-Index: 7 (Google Scholar)

- Adhikari, P., Bhatia, H., Sadanand, Poudel, S., Paudel, R., Srivastava, G.,
 Paudayal, K.N., 2025. Leaf impressions from the Lower Siwalik sediments of eastern
 Nepal and their climatic and phytogeographic implications. *Journal of the*Palaeontological Society of India, 1–10. https://doi.org/10.1177/05529360251352619
 (Impact factor= 0.6).
- 2. Srivastava, G., **Bhatia, H.**, 2025. Climatic shifts and floristic responses during India's tectonic voyage from Gondwana to Asia. *Habitable Planet* 1(1&2), 171–184.
- 3. **Bhatia, H.**, Srivastava, G., 2025. Oligocene cf. *Canarium* L. (Burseraceae) leaflet from India provides new evidence of its Gondwanan legacy. *International Journal of Plant Sciences*. https://doi.org/10.1086/737171 (Impact factor= 1.5).
- Bhatia, H., Srivastava, G., 2025. Earliest Swintonia (Anacardiaceae) fossil from the late Paleogene of India suggests its Gondwanan origin. Geobios. https://doi.org/10.1016/j.geobios.2025.05.008 (Impact factor= 1.6).
- Bhatia, H., Srivastava, G., 2025. Earliest fossil record of *Cryptocarya* R. Br.
 (Lauraceae) from Asia and its biogeographic and palaeoenvironmental implications.

 Palaeobiodiversity and Paleoenvironments. https://doi.org/10.1007/s12549-025-00658-1. (Impact factor= 1.4).

- Bhatia, H., Dar, R.A., Srivastava, G., 2025. Himalayan uplift and the evolution of a
 Mediterranean-type climate in the Kashmir Basin of India: Palaeobotanical evidence
 from the late Pliocene Dubjan Member (Karewa Group). *Palaeogeography,*Palaeoclimatology, Palaeoecology 672, 112998. (Impact factor= 2.7).
- 7. **Bhatia, H.**, Adhikari, P., Verma, P., Singh, Y.P., Tao, S., Srivastava, G., 2025. Early Miocene ventricose bamboo from South Asia with implications for evolutionary ecology and biogeography. *iScience* 28, 112455. (Impact factor= 4.6).
- 8. **Bhatia, H.**, Srivastava, G., 2025. Rising Himalaya and climate change drive endemism in the Western Ghats. Fossil evidence insights. *Review of Palaeobotany and Palynology* 338, 105348. (Impact factor= 1.7).
- Bhatia, H., Kumari, P., Singh, N.H., Srivastava, G., 2025. Earliest thorny bamboo from Pleistocene of Asia characterizing spinescence and paleoclimatic adaptations in bamboos. *Review of Palaeobotany and Palynology* 338, 105347. (Impact factor= 1.7).
- 10. **Bhatia**, **H**., Lokho, K., Srivastava, G., Ezung, O.C., 2025. Quantifying the equatorial climate shifts in the Indo-Burma range using late Eocene–early Oligocene leaf fossils. *Palaeogeography, Palaeoclimatology, Palaeoecology* 669, 112931. (Impact factor= 2.7).
- 11. Adhikari P., Srivastava G., Farnsworth A., **Bhatia H**., Sadanand, Poudel S., Spicer R.A., Rai L.K., Tao S., Valdes P.J., Paudayal K.N., 2025. Late Miocene weakening of the South Asian Monsoon: Insights from the Siwalik of Nepal. *Palaeogeography, Palaeoclimatology, Palaeoecology* 664, 112789. (Impact factor= 2.7).

- 12. Adhikari P., Rai. L.K., Sadanand, **Bhatia H**., Srivastava G., Thakuri, N.S., Mehrotra R.C., Paudayal K.N., 2024. New records for the Middle Siwalik flora of eastern Nepal and their climatic significance. *Earth History and Biodiversity*, 1, 100003.
- 13. Adhikari P., **Bhatia H**., Khatri D.B., Sadanand, Srivastava G., Mehrotra R.C., Paudayal K.N., 2024. Fig leaf from the Middle Siwalik sediments of eastern Nepal with implication on biogeography and palaeoclimate. *Journal of the Palaeontological Society of India* 69(1), 64–79. **(Impact factor= 0.5)**
- 14. Srivastava G., Bhatia H., Verma P., Singh Y.P., Utescher T., Mehrotra R.C., 2024. A transient shift in equatorial hydrology and vegetation during the Eocene Thermal Maximum 2. Geoscience Frontiers 15, 101838. (Impact factor= 8.5)
- 15. Srivastava G., **Bhatia H.**, Verma P., Singh Y.P., Utescher T., Mehrotra R.C., 2023. High rainfall afforded resilience to tropical rainforests during Early Eocene Climatic Optimum. *Palaeogeography, Palaeoclimatology, Palaeoecology* 628, 111762. (Impact factor= 2.7).
- 16. **Bhatia H.,** Srivastava G., Mehrotra R.C., 2023. *Duabanga* (Lythraceae) from the Oligocene of India and its climatic and phytogeographic significance. *Geobios* 78, 1–13. (Impact factor= 1.6).
- 17. **Bhatia H.**, Srivastava G., Mehrotra R.C., 2023. Cordiaceae wood from the Miocene sediments of northeast India and its phytogeographical significance. *IAWA Journal* 45 (2), 154–166. (Impact factor= 1.9).
- 18. Arora P., Trivedi P.M., **Bhatia H**., Agnihotri P., Kapur V. V., 2023. A Survey of the Anticipated Role of the Indian Museum of Earth (TIME) to Foster Public Awareness

- Towards the Preservation of Palaeontological Relics. *Geoheritage* 15, 109. (Impact factor= 2.3).
- 19. **Bhatia H.**, Srivastava G., Mehrotra R.C., 2023. Legumes from the Paleocene sediments of India and their ecological significance. *Plant Diversity* 45, 199–210. (Impact factor= 4.6).
- 20. Adhikari P., **Bhatia H**., Khatri D.B., Srivastava G., Uhl D., Mehrotra R.C., Paudayal K.N., 2023. Plant fossils from the middle Siwalik of eastern Nepal and their climatic and phytogeographic significance. *Palaeobiodiversity and Paleoenvironments* 103, 57–69. (Impact factor= 1.4).
- 21. Bhatia H., Srivastava G., Mehrotra R.C., Paudayal K.N., 2023. Floral Diversity and Climate Change in the Siwalik Succession. In: Phartiyal, B., Mohan, R., Chakraborty, S., Dutta, V., Gupta, A.K. (eds) Climate Change and Environmental Impacts: Past, Present and Future Perspective. Society of Earth Scientists Series. Springer, Cham. https://doi.org/10.1007/978-3- 031-13119-6_1.
- 22. **Bhatia H**., Srivastava G., Adhikari P., Su Tao, Utescher T., Paudayal K.N., Mehrotra R.C., 2022. Asian monsoon and vegetation shift: evidence from the Siwalik succession of India. *Geological Magazine* 159 (8), 1397–1414. (Impact factor= 2.3).
- 23. Bhatia H., Srivastava G., Spicer R.A., Farnsworth A., Spicer T.E.V., Mehrotra R.C., Paudayal K.N., Valdes P., 2021. Leaf physiognomy records the Miocene intensification of the south Asia monsoon. *Global and Planetary Change* 196, 103365. (Impact Factor= 4.0).
- 24. **Bhatia H**., Khan M.A., Srivastava G., Hazra T., Spicer R.A., Hazra M., Mehrotra R.C., Spicer T.E.V., Bera S., Roy K., 2021. Late Cretaceous–Paleogene monsoon

- climate vis-à-vis movement of the Indian plate, and the birth of the south Asian monsoon. *Gondwana Research* 93, 89–100. (Impact Factor= 8.6).
- 25. **Bhatia H.**, Srivastava G., Mishra S.R., Barman P., Su Tao, Mehrotra R.C., Tripathi S.C., 2021. Warm and humid Trans-Himalaya during the late Miocene: plant fossil evidence. *Palaeoworld* 31, 542–549. (Impact Factor= 1.7).
- 26. Srivastava G., Farnsworth A., **Bhatia H**., Mehrotra R.C., Shekhar M., Tao Su, Utescher T., Valdes P.J., 2021. Climate and vegetation change during the Upper Siwalik—a study based on the palaeobotanical record of the eastern Himalaya. *Palaeobiodiversity and Paleoenvironments* 101, 103–121. (Impact Factor= 1.4).
- 27. **Bhatia H.**, Srivastava G., Mehrotra R.C., 2021. Late Oligocene climate and floristic diversity of Assam, Northeast India. *Journal of Palaeosciences* 69, 73–92.

CONFERENCES

International (Offline-1; Online-6)

National (Offline-2; Online-1)

- International virtual NECLIME conference during December 1-4, 2023 on "Evidence
 and drivers for origin and appearance of modern plants and vegetation types" and
 presented a paper on "Late Oligocene modernization of the evergreen forests and
 climate in South Asia".
- International virtual NECLIME conference during November 21-25, 2022 on "past biodiversity and extreme environments" and presented a paper on "Duabanga (Lythraceae) from the Oligocene of India and its implication on the evolution of biodiversity hotspots in south Asia".
- 3. National conference on "Ecological Restoration and Biodiversity Conservation" organized by Clean and Green Environmental Society and CSIR-National Botanical Research Institute, Lucknow from September 17-18, 2022 and presented a paper entitled "Endemism due to climate change— floral evidence from the late Oligocene (~25 Ma) sediments of India".
- 4. National conference on "Effects of climate change on Himalayan Biodiversity", organized by University of Chicago and Delhi University from 16-17 May 2022, and presented a paper entitled "Oligocene-Miocene vegetation and climate of the Himalayan foreland basin".
- International virtual NECLIME conference on "Neogene Climate Evolution and Biotic Response(s) in South Asia", 7-9 September, 2021 organized by Birbal Sahni

- Institute of Palaeosciences and presented a paper entitled " Fossil wood of Cordia L.

 From the Tipam Sandstone formation of northeastern India".
- 6. International virtual NECLIME conference during April 19-22, 2021 and presented a paper on "Advent of monsoonal climate and evolution of evergreen forest in South Asia: evidence from Oligocene flora of India".
- Two Day Online International Conference on Paleoclimate Changes (ICPC 2020)
 organized by VIT Chennai from July 9-10, 2020.
- 8. National conference "4th National Geo-Research Scholars Meet 2020" organized by Wadia Institute of Himalayan Geology from June 23-24, 2020.
- International Virtual Conference on "EARTH'S CHANGING CLIMATE: Past, Present & Future" organized by The Society of Earth Scientists & BSIP during 15-17 October 2020 and presented a paper entitled "Late Oligocene–Miocene climate and vegetation of Northeast India: Megafossil evidences".
- 10. International conference on "From sea level to world roof: Uplift history and biological evolution of the Himalaya" organized by Institute of Botany, Beijing, China during July 08–14, 2019 and presented paper entitled "Quantification of Siwalik vegetation and climate of the eastern Himalaya".

WORKSHOP/TRAINING

 One-week online training program on ICT tools for teaching, learning and administration organized by Department of Electronics and Communication, University of Allahabad, Prayagraj from Aug 04 - Aug 10, 2020.

- 2. Three days GIS short term workshop organized by Dept. of Geography ICS College Khed & SM College Poladpur, Maharashtra from August 1–3, 2020.
- E-Training on "Basics of Structural Geology" conducted by T.C. Division of Geological Survey of India Training Institute, Hyderabad from 07.09.2020 to 09.09.2020.