

RESUME

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Educational Qualifications :

B.Sc. (Hons.)	B.H.U., Varanasi	1982
M.Sc. (Geology)	B.H.U., Varanasi	1985
Ph.D. (Geology)	B.H.U., Varanasi	1989

Field of Specialisation: Paleontology & Stratigraphy.

Publications: 73 (Full papers – 45, Abstracts/report – 28)

Award: Sharda Chandra Gold Medal – 2011 by the Palaeontological Society of India for best scientific contribution in Palaeontology.

Membership of Learned/ Professional National / International Bodies:

Member, international Working Group on Kimmeridgian/Tithonian (Jurassic) under International Commission of Stratigraphy.

Research Interest

The Indian marine Jurassic – Cretaceous sedimentary successions. The studies are principally aimed at applicative aspects of paleontology including development of high resolution biostratigraphic framework on the south Tethyan margin, sequence stratigraphy, recognition of oceanic anoxic events, several plate tectonic events, intrabasinal to intercontinental correlations of geological events etc.. The tools used are the systematic revision of the chronostratigraphically significant fauna during the Mesozoic on modern trends. The ammonoid studies have also been used for comprehension of interplay of eustasy, sediment supply, sequence stratigraphy, paleogeography, plate tectonics etc.

Full Research Papers (published/accepted/communicated)

1. Kumar, S., Jaitly, A. K., Pandey, B., Pathak, D. B. and Gautam, J. P. Comm. Turonian (Late Cretaceous) limids (bivalve) from the Bagh Group, central India. **Journal Palaeontological Society of India**,
2. Kumar, S., Pathak, D. B., Jaitly, A. K. and Gautam, J. P. Comm. The age of the Nodular Limestone Formation (Late Cretaceous), Narmada Basin, central India, **Journal of Earth System Science**.
3. Pandey, B., Pathak, D. B., Mathur, N., Singh, P.K. and Jaitly, A.K. Comm A preliminary evaluation on the prospects of hydrocarbon potential in the carbonaceous shales of Spiti and Chikkim formations, Tethys Himalaya, India. **Journal of Geological Society of India**.
4. Pandey, B., Pathak, D.B. and Jaitly, A.K. In Press. A new ammonite genus *Geticeras* gen. nov. from the Lower Valanginian (Lower Cretaceous) of the Spiti Valley, Tethys Himalaya, India. **Himalayan Geology**.
5. Pandey, B. and Pathak, D.B. 2017 Biostratigraphic implication of *Olcostephanus* Neumayr 1875 (Ammonoidea) from the Lower Cretaceous Giumal Formation, Spiti Valley, Tethys Himalaya, India. **Cretaceous Research** Vol. 70, pp. 244-251.

6. Pandey, B. and **Pathak, D.B.** 2016 The possibility of the Oceanic Anoxic Events (OAEs) study in the Indian marine Jurassic - Cretaceous outcrops. **Journal of Geological Society of India**, Vol. 87, pp.261-267.
7. Kumar, S., Gautam, J. P., Pandey, B., **Pathak, D. B.** and Jaitly, A. K. 2016 Some Unknown Arcid Bivalves from the Turonian (Late Cretaceous) of Central India. **International Journal of Science and Research (IJSR)**, Vol. 5(3) 1405-1410.
8. Mamilla, V., Pandey, B., **Pathak, D.B.**, Guguloth, P. and Krishna, J. 2016 Magnetostratigraphy of the Middle Jurassic Sediments from Kachchh Basin, Western India. **International Journal of Geosciences**, Vol.7, 301-310.
9. Pandey, B. and **D.B. Pathak** 2015 Status of the Indian Early Cretaceous ammonoid record in light of recent observations in the Spiti Valley, Himachal Himalaya. **Himalayan Geology**, Vol. 36 (1), pp. 1-8.
10. Pandey, B. and **D.B. Pathak** 2015 Record of Early Bathonian ammonoids from Kachchh, India: Biostratigraphic and Palaeobiogeographic implications. **Journal Palaeontological Society of India**, Vol. 60 (1), pp. 33-44.
11. Gautam, J.P., Pandey, B., **Pathak, D.B.** and Jaitly, A.K. 2015 Recognition of the Early Albian *Douvilleiceras mammillatum* Zone in the Cauvery Basin, SE India, **Earth Science India**, Vol. 8 (IV), pp. 100-111.
12. Mamilla, V., Pandey B., Pappana, G., **Pathak, D. B.** and Krishna, J. 2014 New Palaeomagnetic Evidences about Deccan Trap volcanic activity from the magmatic bodies of Kachchh Basin, Northwest India. **Journal of Indian Geophysical Union**, Vol. 18 (1), pp. 99-107.
13. Pandey B., **Pathak D. B.** and Krishna, J. 2013 *Calliphylloceras heterophylloides* (Oppel, 1856) from basal most Jurassic succession of Sadhara dome, Kachchh, India. **Journal Palaeontological Society of India** Vol. 58 (1), pp. 61-65.
14. Pandey, B., **Pathak D. B.** and Krishna, J. 2013 Preliminary remarks on new ammonoid collection from freshly exposed succession of the Spiti Formation between Lidang and Giumal, Spiti Valley, Himachal Himalaya, India. **Himalayan Geology**, Vol. 34 (2), pp.124-134.
15. Pandey, B., **Pathak, D. B.**, Jaitly, A. K., Krishna, J. and Mamilla, V. 2012 Record of Tethyan gastropod genus *Astrohelix* Szabó, 1984 from Late Bajocian (Middle Jurassic) of Kachchh, western India. **Indian Journal of Geosciences**, Vol. 66 (1), pp. 65-68.
16. Pandey, B., Krishna, J., **Pathak D. B.** and Kumar, A. 2012 Ammonoid Biostratigraphy of Bathonian Succession at Jumara, Kachchh, Western India. **Journal Indian Geological Congress**, Vol. 4(2), pp. 7-18.
17. **Pathak, D.B.**, Krishna, J. and Pandey, B. 2011 Differentiation of the Significant Late Valanginian (Early Cretaceous) transgressive event in the Spiti Himalaya, India. **Journal of Asian Earth Sciences**, Vol. 42, pp. 1226-1231.
18. Krishna, J., Pandey, B. and **Pathak, D.B.** 2011 Current Status of the Jurassic Ammonoid Stratigraphic Framework in the Indian Subcontinent with Focus on the Tectonically controlled Regional Transgressive – Regressive Couplets. **Memoir of the Geological Society of India**, No. 78, pp. 140-176.
19. Pandey, B., Krishna, J. and **Pathak, D.B.** 2010 Review of the Ammonoid Subfamily Virgatosphinctinae with special reference to its Evolutionary Succession in the Indian Subcontinent on the Gondwanian Tethyan Margin. **Journal of Scientific Research**, BHU, Varanasi, Vol. 54 (1&2), pp. 21-34.
20. Krishna, J., Pandey, B. and **Pathak, D.B.** 2010 Update on the Jurassic Stratigraphy of the Indian Subcontinent with Focus on the Tectonically Controlled Regional Transgressive – Regressive Couplets. **Earth Science Frontiers**, China University of Geosciences, Vol. 17, pp.138-140.

21. Krishna, J., Pandey, B. and **Pathak, D.B.** 2009 Characterization of *Dichotomoceras* in the Oxfordian of Kachchh. **Journal Geological Society of India**. Vol. 74, pp. 469-479.
22. Krishna, J., Pandey, B., Ojha, J.R. and **Pathak, D.B.** 2009 Reappraisal of the age framework, correlation, environment and nomenclature of Kachchh Mesozoic lithostratigraphic units in Wagad. **Journal of Scientific Research**, Banaras Hindu University, Jurassic/Cretaceous Boundary in the Spiti Himalaya, India. **Journal of the Palaeontological Society of India**, Vol. 52 (1), pp. 51-57.
24. **Pathak, D.B.** 2007 The Jurassic/Cretaceous Boundary and its identification in Tethys Himalaya. Mem. **Memoir Geological Society of India**, No. 46, pp. 421-423.
25. **Pathak, D.B.** 2000 Transgressive Sediment Intervals in the Late Jurassic of Kachchh, India. **Geo Research Forum, Transtec Publications, Switzerland**, Vol. 6, pp. 321-332.
26. Krishna, J., **Pathak, D.B.**, Pandey, B. and Ojha, J.R. 2000 Ammonoid – Foraminifer Zonal Integration in the Jurassic of Kachchh, India. **ONGC Bulletin**, Vol. 37(1), pp. 9-21.
27. Krishna, J., Pandey, B., Ojha, J.R. and **Pathak, D.B.** 2000 Development of Oxfordian (Early Upper Jurassic) in the most Proximally Exposed Part of Kachchh Basin at Wagad Outside the Kachchh Mainland. **Journal Geological Society of India**, Vol. 52, pp. 513-22.
28. Krishna, J., **Pathak, D.B.** and Pandey, B. 1998 Spiti Shale Bivalves from Chichim and Gate, Spiti Valley, Himachal Pradesh, India. **Himalayan Geology**, Vol. 19 (1), pp. 29-37.
29. Kanjilal, S. and **Pathak, D.B.** 1998 Ammonoid Stratigraphy of the Spiti Shale Formation in the Spiti Himalaya, India. **Journal Geological Society of India**, Vol. 50, pp. 191-200.
30. **Pathak, D.B.** 1997 Ammonoid age control in the Mesozoic succession of Wagad outside the Mainland Kachchh. **Geophytology**, Vol. 26 (1), pp. 63-68.
31. Krishna, J., **Pathak, D.B.** and Pandey, B. 1996 Ammonoid Chronology in the Tithonian of Kachchh (India). **Geo Research Forum, Transtec Publications, Switzerland**, Vol. 1-2, pp. 205-214.
32. Krishna, J., Pandey, B. and **Pathak, D.B.** 1996 Quantum Refinement in the Kimmeridgian Ammonoid Chronology in Kachchh (India). **Geo Research Forum, Transtec Publications, Switzerland** Vol. 1-2, pp. 195-204.
33. Krishna, J., Pathak, **D.B.** and Pandey, B. 1996 A New Approach to the Correlation of the Upper Kimmeridgian Beckeri Zone across the Tethyan Sea. **Neues Jahrbuch für Geologie und Paläontologie**, Vol. 202 (3), pp. 345-373.
34. Schweigert, G., Krishna, J., Pandey, B. and **Pathak, D.B.** 1996 Middle Oxfordian Ammonites (Perisphinctinae) from Kachchh (India): Biostratigraphic and Paleobiogeographic Implications. **Revista Espanola De Paleontologia**, No. Extraordinario, pp. 140-147.
35. Krishna, J., Melendez, G., Pandey, B. and **Pathak, D.B.** 1995 The Kimmeridgian – Tithonian (Upper Jurassic) ammonoid zones in Kachchh, Gujarat and their Correlation. **Proc. Recent Researches in Geology in Western India**, pp. 323-347.
36. Krishna, J., **Pathak, D.B.** and Pandey, B. 1995 Characterization of the ammonite genus *Larcheria* (Middle Oxfordian) in Kachchh (India): biostratigraphy and palaeobiogeographic evaluation in the context of Tethyan occurrences. **C. R. Acad. Sci. Paris**, Vol. 321(IIa), pp. 1187-1193.
37. Krishna, J., Melendez, G., Pandey, B. and **Pathak, D.B.** 1995

38. Krishna, J. and **Pathak, D.B.** 1994 Stratigraphic, Biogeographic and Environmental Signatures in the Ammonoid bearing Jurassic - Cretaceous of Himalaya on the South Margin of the Tethys. **Journal of Himalayan Geology**, Vol. 4(2), pp. 189-205.
39. Krishna, J., **Pathak, D.B.** 1994 and Pandey, B. New ammonoid evidence for the Jurassic/Cretaceous boundary in Kachchh, Western India, and long distance correlation with Southern Europe. **GEOBIOS**, Vol. 17, pp. 327-335.
40. Srivastava, A.P., Krishna, J., 1994 Rajagopalan, G., **Pathak, D.B.** and Ojha, J.R. The First Ever Absolute age determination from the Jurassic of Kachchh, Western India. **GEOBIOS**, Vol. 17, pp. 529-533.
41. Krishna, J., Melendez, G., 1994 Pandey, B. and **Pathak, D.B.** Middle Oxfordian Perisphinctinae and biostratigraphy from Kachchh (India). Comunicaciones de las X **Jornadas de Paleontologia**, pp. 106-108.
42. Krishna, J. and **Pathak, D.B.** 1993 Late Lower Kimmeridgian – Lower Tithonian Virgatosphinctins of India: Evolutionary Succession and Biogeographic Implications. **GEOBIOS**, Vol. 15, pp. 227-238.
43. **Pathak, D. B.** and Krishna, 1993 J. Preliminary Remarks on the Biostratigraphic relevance of the Ammonoid collection from Spiti Shale Formation, Tethys Himalaya India. **Journal of Himalayan Geology**, Vol. 4 (2), pp. 207-221.
44. **Pathak, D.B.** 1993 The first record of the Ammonite genus *Hybonoticerias* from the Himalaya and its biostratigraphic significance. **Newsletters on Stratigraphy, Berlin–Stuttgart**, Vol. 28 (2/3), pp. 121-129.
45. Krishna, J. and **Pathak, D.B.** 1991 Ammonoid Biochronology of the Upper Jurassic Kimmeridgian Stage in Kachchh, India. **Journal of the Palaeontological Society of India**, Vol. 36, pp. 1-13.

Other important articles

(Abstracts/report)

1. **Pathak, D.B.**, Pandey, B., 2017 Jaitly, A.K., Gautam J. P. and Kumar, S. Recent developments in the Early Cretaceous ammonoid biostratigraphy in India. **Nat. Sem., Sagar University, Oct. 26-28**, P. 77.
2. Jaitly, A.K., **Pathak, D.B.**, 2017 Pandey, B., Kumar, S. and Gautam J. P. The Turonian (Late Cretaceous) bivalves from the Bagh Group, central India: A review. **Nat. Sem., Sagar University, Oct. 26-28**, p. 46.
3. Gautam J. P., Pandey, B., 2017 Jaitly, A.K., **Pathak, D.B.**, and Kumar, S. Albian ammonites from the Karai Formation, Cauvery Basin, Tamil Nadu. **Nat. Sem., Sagar University, Oct. 26-28**, P. 80.
4. **Pathak, D.B.** and Pandey, 2014 B. Discovery of Early Bathonian ammonites from Kachchh, western India and their biostratigraphic implications. **9th International Congress on the Jurassic System, University of Rajasthan, Jaipur**, p. 133.
5. Pandey, B. and **Pathak D.B.** 2014 Update on the litho and biostratigraphy of the Lower Cretaceous sedimentary succession in the Spiti Himalaya, India. **National Conference on Sedimentation and Stratigraphy & xxxi convention of Indian association of Sedimentologists, Department of Geology, University of Pune**, pp. 72-73.

6. **Pathak, D. B.** and Pandey, B. 2013 Early Cretaceous Ammonoid Stratigraphy in the Indian Geological Record: Present Status and Future Prospects. **Earth Sciences in India: Challenges and Emerging trends, Department of Earth Sciences, IIT, Roorkee**, pp. 71-72.
7. **Pathak D. B.**, Pandey, B. and Krishna, J. 2012 Ammonite genus *Torquatisphinctes* Spath from Kachchh, West India: taxonomic description and revision of its species. **National Level Field Workshop and Brainstorming session on Geology of Kachchh basin, Western India: present Status and Future Perspective. Dept. of Earth and Env. Sci., KSKV, Kachchh University, Bhuj-Kachchh**, p. 35.
8. Krishna, J., Pandey, B. 2012 **Pathak, D.B.** and Mamilla, V. Preliminary Sequence Stratigraphic insight into the Bathonian Sedimentary Succession of Kachchh, Gujarat (India). **National Level Field Workshop and Brainstorming session on Geology of Kachchh basin, Western India: present Status and Future Perspective. Dept. of Earth and Env. Sci., KSKV, Kachchh University, Bhuj-Kachchh**, p. 30.
9. Pandey, B., Krishna, J. 2012 **Pathak, D. B.** and Kumar, A. Ammonoids from Bathonian of Jumara, Kachchh, West India and their biostratigraphic implication. **National Level Field Workshop and Brainstorming session on Geology of Kachchh basin, Western India: present Status and Future Perspective. Dept. of Earth and Env. Sci., KSKV, Kachchh University, Bhuj-Kachchh**, p. 34.
10. Mamilla, V., Pandey, B., Krishna, J., **Pathak, D.B.**, Papanna, G. and Kumar, A. 2012 Magnetostratigraphy of the Kachchh Basin, India. **National Level Field Workshop and Brainstorming session on Geology of Kachchh basin, Western India: present Status and Future Perspective. Dept. of Earth and Env. Sci., KSKV, Kachchh University, Bhuj-Kachchh**, p. 43.
11. Pandey, B. and **Pathak, D.B.** 2011 Ammonoids from Spiti Shale Formation around Diumal, Spiti, Himachal Pradesh (India) and their biostratigraphic implications (Abst.). **National Conference, Stratigraphy, Palaeontology and Palaeoenvironment, Geology Department, Rajasthan University, Jaipur**, pp. 1-2.
12. **Pathak D.B.** and Pandey B. 2009 Sustainable development of rural India through basic minimum services. **National Symposium, The Planet Earth, Banaras Hindu University, Varanasi**, pp. 38.
13. Krishna, J., Pandey, B. and **Pathak, D.B.** 2009 Drinking water quality: research and monitoring Strategies. **National Symposium, The Planet Earth, Banaras Hindu University, Varanasi**, pp. 27-28.
14. **Pathak, D.B.** and Kanjilal, S. 2005 Effect of eustasy on Late Jurassic Macroinvertebrate Assemblages of Tethys Himalaya. **International Seminar on the Northward Flight of India in Mesozoic – Cenozoic : Consequences on Biotic Changes and Evolution, Lucknow University**.
15. Krishna, J., Pandey, B., Ojha, J.R. and **Pathak D.B.** 2000 Fine order cyclicity: example from Late Jurassic of Kachchh. **National Symposium on Kachchh basin, Banaras Hindu University, Varanasi**, p. 50.
16. Krishna, J., Pandey, B. and **Pathak D.B.** 2000 Evolution of the foraminifer stratigraphic data vis-à-vis recently realized high resolution ammonoid based Late Jurassic temporal framework. **National Symposium on Kachchh basin, Banaras Hindu University, Varanasi**, p. 13.

17. Krishna, J., **Pathak, D.B.**, 1996
Pandey, B. and Ojha, J.R. High Resolution basinal dynamics in the Kachchh Mesozoic as unfolded through ammonoids. **Platinum Jubilee. National Symposium and XIII Convension of Indian Association of Sedimentologist, banaras Hindu University**, pp. A2 16- 17.
18. Krishna, J., Pandey, B. and 1996
Pathak, D.B. Preliminary remarks on the litho and biostratigraphy of the Upper Jurassic Bhadasar Formation of Jaisalmer basic in light of new data. **Geowest R-96, Jodhpur**, pp.8-9.
19. Krishna, J., **Pathak, D.B.**, 1996
Pandey, B. and Ojha, J.R. Ammonoid distribution in the Callovian - Tithonian interval of Kachchh (India) applied to the understanding of basinal dynamics **IV International Symposium Cephalopods - Present and Past, Granada**, pp. 94-96.
20. Krishna, J. **Pathak, D.B.** 1996
and Pandey, B Heterochronic evolutionary framework in the Kachchh Kimmeridgian - Tithonian ammonoid lineages : implications to taxonomic differentiation, chronology and eustasy, **IV International Symposium Cephalopods - Present and Past, Granada**, pp. 92-93.
21. Krishna, J. and **Pathak,** 1996
D.B. Tectonics vis-a-vis Eustasy in the Permian to Cretaceous evolution of the Tethys Himalaya. **11th Himalaya – Tibet – Karakoram Workshop, Arizona, U. S. A.**
22. **Pathak, D.B.**, Pandey, B. 1995
and Krishna, J. The first ever differentiation of the significant Upper Valanginian transgressive event in India in the Spiti Himalaya. **Symposim on Tethyan Himalaya and adjoining region, W.I.H.G., Dehra Dun**, pp. 32-33.
23. Krishna, J., **Pathak, D.B.** 1994
and Pandey, B. The Kimmeridgian ammonoid from Spiti Shale Formation, Indian Himalaya : Biostratigraphy and Palaeogeographic implications. **4th Himalaya – Tibet – Karakoram Workshop, Kathmandu, Nepal.**
24. Krishna, J., **Pathak, D.B.** 1994
and Pandey, B. Discovery of Middle and Late Oxfordian in Kachchh (India) with first ever approximation of the Oxfordian/Kimmeridgian boundary in Indian Subcontinent. **4th Oxfordian - Kimmeridgian Working Group Meeting, Lyon, France**, p. 10.
25. Krishna, J., **Pathak, D.B.**, 1993
Pandey, B. and Ojha, J.R. The Jurassic/ Cretaceous system and Upper Jurassic interstage boundary in Kachchh, Gujarat. **Indian Geological Congress, Thanjavur (T.N.).**
26. **Pathak, D.B.** 1992 **Ammonoid** systematics and biochronology of the Spiti Shale Formation, Tethys Himalaya, India. **9th Gp. Monitoring Workshop on DST Young Scientist Proj.**, Mysore, India, 52-57.
27. Krishna, J., **Pathak, D.B.** 1992
and Pandey, B. The problem of recognition of the Kimmeridgian stage and delineation of Kimmeridgian / Tithonian boundary on the south-east margin of the Tethys. **Oxfordian - Kimmeridgian Joint Working Group Meeting, Warszawa, Poland.**
28. Krishna, J., **Pathak, D.B.**, 1991
Dubey, N., Pandey, B. and Ojha, J.R. The Jurassic of Kachchh: an integrated model of high resolution stratigraphy, environmental framework and Vail sea level cycles. **2nd Seminar on Petroliferous Basins India, Dehradun**, pp. 104-106.
29. Krishna, J. and **Pathak,** 1989
D.B. Kimmeridgian in Ler – Katrol area of Kachchh, Western India: ammonoid systematics and biochronology. **28th Internat. Geol. Congress, Washington, U.S.A.**, pp. 228-229.

30. Krishna, J. and **Pathak, D.B.** 1989 Ammonoid systematic and biochronology of the Upper Jurassic Kimmeridgian Stage in Kachchh, India. **XIIIth Indian Colloquium on Micropaeontology and Stratigraphy Lucknow, India**, pp. 32-33.