

CURRICULUM VITAE

Dr. Uma Kant Shukla

Professor of Geology
Department of Geology
BanarasHinduUniversity
Varanasi -221005
(U. P.) India
E-mail: shukla_umakant@yahoo.com

PERMANENT ADDRESS

Flat No. 305, Tribhuwan Kripa Apartment
Koshlesh Nagar-Sundarpur
Varanasi-221005 (U.P.)

MAILING ADDRESS

Centre of Advanced Study in Geology
BanarasHinduUniversity
Varanasi -221005
(U. P.) India

DATE OF BIRTH

September, 19, 1965

PLACE OF BIRTH

Fatehpur, U.P. India

EDUCATION

1981	High School	Hindi, Eng., Sci., Bio., Maths	I	Colvin Taluqedar's College, Lucknow
1983	Intermediate	Hindi, Eng., Phy., Chem., Bio.	I	-do-
1985	B. Sc.	Botany, Zoology	I	LucknowUniversity, Lucknow
1987	M.Sc.	Geology	I	-do-
1992	Ph. D.	Geology* (Sedimentology)		LucknowUniversity Lucknow

* **Title of the Thesis:** Facies Analysis of the Bhuj Sandstone (Lower Cretaceous), Kachchh, Gujrat, India.

LANGUAGES

Hindi and English, German

SCHOLARSHIPS

- 1987 - 1988:** Worked as Junior Research Fellow in a C. S. I. R. sponsored project on Sedimentology and Biostratigraphy of Phanerozoic Tethyan sequence of Mallajohar area, U. P. Himalaya.
- 1990 - 1991:** Worked as Senior Research Fellow of C. S. I. R., New Delhi Mesozoic arenaceous sequence of Kachchh, Gujrat, India.
- 2004 – 2006:** Awarded **Alexander von Humboldt Fellowship** by Humboldt Foundation of Germany to work upon the Carnian Stuttgart Formation Germanic Triassic Basin.

RESEARCH PROJECTS

- 1996 - 1998:** Principal Investigator of a D. S. T., New Delhi sponsored “Young Scientist Project” on “Facies Analysis of Kumaun Siwaliks and their comparison with Gangetic Plain Sediments” (Rs. 2,60,000/-).

PROFESSIONAL EXPERIENCE

- 2018-Present** Senior Professor in Geology, BHU, Varanasi, India.
- 2008-2018:** Professor in Centre for Advanced Study in Geology, BHU, Varanasi, India.
- 2006-2008:** Associate Professor in Centre for Advanced Study in Geology, BHU, Varanasi, India.
- 2004-2006:** Reader in Geology Banaras Hindu University, Varanasi, India.
- 2000-2004:** Reader in Geology, Kumaun University, Nainital, India.
- 1996 - 2000:** Senior Lecturer in Geology, Kumaun University, Nainital, India.
- 1991 - 1996:** Lecturer in Geology, Kumaun University, Nainital.

FIELD OF SPECIALIZATION

Sedimentary geology, fluvial sedimentology, Quaternary geology, palaeoclimate reconstruction, shallow marine-coastal deposits, sequence stratigraphy, sedimentary processes and facies analysis, petrography and study of trace fossils, geoarchaeology.

RESEARCH INTEREST

30 years of doctoral and postdoctoral research experience on the Indian stratigraphic sedimentary records ranging from Precambrian to Holocene. Research interest hinges on facies analysis of ancient and modern deposits of fluvial, marine and lake origin. For the last more than two decade, using modern tools such as, architectural element analysis,

palaeocurrent, trace fossil etc, Himalayan Foreland Basin deposits including ancient Neogene Siwalik sequences and modern Gangetic Foreland Basin sediments have been studied to generate facies models for various depositional domains, and to evaluate the role of synsedimentary tectonics and palaeoclimate influencing the mode of sedimentation through Neogene-Quaternary times. Study of modern fluvial processes has been helpful to understand the river dynamics in the past. Incised valley system of Gangetic Plain rivers has also been compared to Stuttgart Formation (Carnian, Late Triassic) of Germany believed have formed under similar climatic settings. Lately, paleoclimatic response to glaciers of Suru-Sub-basin, Kashmir has been carried out based solely on field approach. Palaeoclimatic studies have also been done using marine borehole data and continental records of the Higher Himalayan and palaeolake deposits of Ladakh using multiproxy approach emphasizing on pollen records, OSL dating and sedimentological tools on collaborative basis.

Recently, it has been realized that Geoarchaeological studies of ancient settlements may have societal implications and can help masses to understand existing myths and traditions in a more scientific way. Therefore, a collaborative attempt has been made involving experts from Archaeology and Geography Departments of BHU to unravel the settlement history of Varanasi city and its possible evolution with the dynamics of River Ganga through ages.

Study of the Cretaceous Lameta - Bagh Formation of Central India, Precambrian sequences of Kumaun Lesser Himalaya and the Vindhyan basin has helped understanding the processes of sedimentation, facies models and palaeogeographic reconstruction of these basins. Permian-Triassic Boundary in Spiti Himalaya has been studied and a major catastrophe has been deduced.

RESEARCH GUIDENCE

1. Dr. D. S. Bora: “Facies architecture and sedimentary models of the Lower Siwalik succession between Ramganga and Gaula Rivers in Kumaun Himalaya” (awarded).
2. Ms. Rekha Rani: “Facies architecture and palaeoenvironment of Middle Siwalik succession of Mohand area, Dehra Dun Valley, India” (awarded).
3. Omnath Saha: “Lithofacies and sedimentation pattern of Lameta and Bagh Beds (Upper Cretaceous), Central India” (awarded).
4. Anju Verma: “Lithofacies analysis of the Rewa Group around Rewa District (M. P.), India” (awarded)
5. Tanu Shukla: “Lithofacies analysis of the Kaimur Group of Ahraura and Markundi sections, Mirzapur-Sonbhadra Districts (U. P.), India” (awarded).

6. Manish Kumar Pandey: Confluence dynamics of Lower Son River with river Ganga: Tectonic and Climatic perspective” (awarded).
7. Ali Adnan: “Lithofacies and palaeoenvironmental analysis of the Late Proterozoic Bhandar Group (Vindhyan Basin) in and around Maihar area, (M.P.), India” (awarded).
8. Saurabh Singh: “GIS based geomorphology and sedimentological investigation of the Ganga River between Allahabad and Buxar” (awarded).
9. Rupa Ghosh: “Late Quaternary geological evolution of Yamuna River valley, Marginal Ganga Plain in the Himalayan foreland” (awarded).
10. Siddhi Garg: “Glaciological studies of the Kangri glacier, Suru Sub-basin. Jammu and Kashmir: An integrated field and remote sensing approach” (awarded)-2021.
11. C.P. Sharma: “Palaeoclimatic reconstruction from the Late Pleistocene-Holocene Sedimentary Archives of Ladakh Himalaya” (awarded) - 2021.
12. Salman Khan: “Pliocene-Pleistocene changes in Vegetation, Climate and Sedimentation in Middle and High latitudes” (awarded) - 2022.
13. Amit Kumar Mishra: “Vegetation dynamics, climate change and anthropogenic impact during the Holocene from Chopta-Tungnath region, Western Himalaya, India.” (awarded) – 2022.
14. 7 Ph.D. on different aspects of earth sciences (in progress)
15. About 45 M. Sc. Dissertation on various aspects of Lower, Middle and Upper Siwalik sequences deposited between Mid-Miocene to Mid-Pleistocene times, and Gangetic Foreland basin sediments, Cretaceous Lameta Formation of central India, Mesozoic of Kachchh Basin and Proterozoic Vindhyan Basin.

PDF MENTORSHIP

1. Tanuja Deopa: Working as D. S. Kothari Postdoctoral Fellow on the topic titled “Sedimentary Architecture and Geochemical behavior of the Middle Siwalik Group of the south-central Himalaya, Himachal Pradesh, India”.
2. Sanghita Dasgupta: Working as Malviya Post-Doctoral Fellow, BHU, on the aspect “Reconstruction of the palaeoenvironment during Gondwana sedimentation in India, using palaeoclimatic proxies from freshwater carbonates”.

3. Jyoti Bora Pandey: Working as Woman Scientist, DST, New Delhi, on the topic "Green Algae from Gurmatkal Region of Karnataka: Implications on Dynamics of Energy Transfer within an Ecosystem."

COURSES TAUGHT

Kumaun University, Nainital

Undergraduate	Petrology, Palaeontology, Introductory structural geology, Economic Geology.
Graduate	Sedimentary rocks, Petrography of sedimentary rocks, Depositional environmental system, Sedimentology, Stratigraphy, Petroleum geology, Geological evolution of India, Proterozoic sedimentation basins of India, Quaternary climates, Mesozoic-Cenozoic basins of India and Geodynamics.

Banaras Hindu University

Undergraduate	Sedimentary Geology
Graduate	Basin analysis, Sedimentary processes, Sequence stratigraphy, Sedimentary depositional systems. Earth System-Frontier Areas (minor elective) and soil science as major elective.

MEMBERSHIP/PAPER REVIEW

1. Member of Palaeontological Society of India (PSI), India.
2. Member of The Gondwana geological Society. Nagpur.
3. Member of India Association of Sedimentologists, Aligarh.
4. Reviewer of the papers published by Journal Palaeontological Society of India, Journal of the Indian Association of Sedimentologists, Himalayan Geology, Current Science, Indian Journal of Geochemistry and Proceedings of INSA, Journal of Earth System Science (Springer, India), Journal Geological Society of India (Springer), Cretaceous Research (Elsevier), Geomorphology, Asian Journal of Earth Sciences, Arabian Journal of Earth Sciences, African Journal of earth Sciences, Geological Journal, Quaternary International, PPP etc.

ADMINISTRATIVE EXPERIENCE

1. Worked as a member of admission committee for UG and PG classes, in the Science Faculty, Kumaun University, Nainital.
2. Ex-Warden, Dalmia Hostel, BHU, Varanasi.
3. Member of admission committee for PG classes in BHU.
4. Member of Medal distribution committee of convocations in BHU.

MEMBERSHIP OF FUNDING AGENCIES

1. Co-opted expert member of Science and Engineering Research Board (**SERB**), Dst, Govt. of India, New Delhi (2015-18).
2. Expert Member of Project Monitoring and Assessment Committee (**PMAC**), Ministry of Earth Sciences (**MoES**), New Delhi (2015-2018).
3. Expert member of core committee of **SERB** for NPDF and SRG, DST New Delhi (2020-2021).

MEMBERSHIP OF UNIVERSITIES/INSTITUTES

1. Research Advisory Council (RAC) Member of BSIP, Lucknow (2021-2024).
2. Member of Board of Studies for the Department of Geology, Indira Gandhi National Tribal University, Amarkantak (M.P.) (2021-present).
3. Member to the School Boards of all the Schools, Sikkim University, Sikkim, Gangtok, India (2019-present).
4. Research Advisory Council (RAC) Member of WIHG, Dehradun (2025- Continued).

FOREIGN VISITS

1. 20 days visit to Martin-Luther University Halle-Wittenburg, Germany for academic interaction and fieldwork on Germanic Triassic in 2003.
2. 16 months stay in Geological Institute, Martin-Luther University, Wittenberg-Halle, Germany, **as Humboldt Fellow in 2005-2006**.
3. Eight days visit to Erlangen, Germany for academic discussions in 2006.
4. 4 months stay in Dresden, Germany in 2005.
5. 30 days revisit to Martin-Luther University Halle-Wittenburg in Halle in 2007.

SESSIONS CHAIRED

1. Chaired a technical session on sedimentary proxies and palaeoclimate during International conference on Asian Monsoon Variability during the past Global changes (AMV-PGC), Kumaun University, Nainital, Sep. 2007.
2. Chaired a technical session on foreland basin sedimentation during National conference on Quaternary Geological Processes: Natural Hazards and Climate change. Centre of Advanced Studies in Geology, Lucknow University, India, Feb. 2009.
3. Chaired a session National Workshop on Indian Siwaliks: Recent Advances and Future Research, GSI, Lucknow, 21-22 June, 2017, 104.

INVITED LECTURES

1. A series of lectures delivered on different aspects of Sedimentology in Martin-Luther University, Wittenberg-Halle, Germany during 2005-6.
1. Invited Lectures on Ganga Plain delivered in Geology Department of Mizoram University, Aizawl in 2010, on Ganga Plain, Lithofacies analysis technique and trace fossil studies.
2. Invited Lectures delivered on Ganga Plain during orientation and refresher courses organized by Staff College, BHU, in 2008, 2010 and 2011, Geomorphology and sedimentology of Ganga Plain and Lithofacies analysis technique.
3. Invited Lectures on History of Ganga Basin. Orientation Course conducted by Staff College, BHU, June 3, 2011.
5. Invited Lectures delivered Ganga Basin. Inspire organized by Staff College, BHU, June 9, 2011. 5.
6. Invited talk on Incision of the Ganga River Near Varanasi: A tectonic response. National Seminar on Modern and Palaeosediments: Implication to climate, Water resource and Environmental changes”, XXVIII Convention id IAS, JNU, Delhi, 24-26th Nov. 2011.
7. Invited talk on “Vertical stratigraphic variations and allocyclic control on the Lower Siwalik Group of Kumaun Himalaya, India. International Conference on “Indian Monsoon and Himalayan Geodynamics” scheduled during November 2-5, 2011 at W.I.H.G. Deharadun, India.
8. Invited talk talk on Geomorphology of ganga River Vis-à-vis Varanasi. IIT BHU, 26.2.2019.
9. Invited talk talk on Geological evolution of Norther Ganga Plain, GSI camp office in Kuju, 24.4.2019.
10. Invited talk on Geological evolution of southern Ganga Plain, GSITI in Kuju, 25.4.2019.
11. Invited talk on Sequence Stratigraphy in GSITI, Kuju, 26.4.2019.
12. Invited talk on validation of Fluvial models in Himalayan Foreland Basin in IISER Pune, 10th Feb. 2020.
13. Given S.N. Bose Lecture in BSIP, Lucknow in March, 2020.

FIELD TRAINING COURSES CONDUCTED

1. A week long course conducted to UG and PG students of combined Geology, Geography and Archaeology Departments of Martin-Luther University Halle-Wittenburg, Germany, during 2006.
2. 5 days course conducted to PG and research students of Geology Department of Mizoram University, Aizawl in 2010.
3. One day course conducted to participants of Refresher Course on Earth System Sciences organized by Staff College, BHU in Jan. 2011.
4. Guiding regular field trips to UG and PG students indifferent geological formations of India since 1991.
5. Guided field excursion of trainees in GSITI, Kujju, 24-26 April, 2019.
6. Guided field excursion of executives of ONGC in FTC, GSI, Kujju, 1-4th Jan., 2020.

Publications

A) Books

1. **Authored:** V. Jayasawl, U. K. Shukla, M. Sharma (2016): Varanasi and Ganga: Geomorphological and Archaeological Investigations at Ramnagar. Aryan Books International, New Delhi, pp. 369.
2. **Edited:** Advances in Remote Sensing Technology and the Three Poles (Edited by, M. Pandey, P.C. Pande, Yogesh Ray, Aman Arora, S.D. Jawak and U.K. Shukla) (Wiley, in press).

B) Research Papers

1. Shukla, U. K. and Singh, I. B. (1990): Facies analysis of Bhuj Sandstone (Lower Cretaceous) Kachchh, India. *Journal Palaeontological Society of India*, 35, 189 – 196.
2. Shukla, U. K. and Singh, I. B. (1990): Markov chain analysis and recognition of transgressive events in Bhuj Sandstone (Late Jurassic-Early Cretaceous), Kachchh, India. In: Cretaceous Event Stratigraphy and Correlation of Nonmarine Strata, Eds. Sahni, A. and Jolly, A. (*Contributions from Seminar/Workshop, IGCP, 216 and 245, Chandigarh, India*), 52 – 54.
3. Singh, I. B. and Shukla, U. K. (1991): Significance of trace fossils in the Bhuj Sandstone (Lower Cretaceous) of eastern Kachchh, India. *Journal Palaeontological Society of India* 36, 121 – 126.
4. Shukla, U. K. and Singh, I. B. (1993): First record of marine macro-invertebrate from Bhuj Sandstone (Lower Cretaceous) of eastern Kachchh. *Current Science*, 62, 171 – 174.

5. **Shukla, U. K.** (1995): Palaeoenvironment of Bist College Member in Krol Formation, Nainital, Lesser Himalaya. *Journal Geological Society of India*, 45, 577 – 583.
6. **Shukla, U. K.** and Pant, C. C. (1996): Facies Analysis of Late Proterozoic Nagthat Formation, Kumaun Lesser Himalaya. *Journal Geological Society of India*, 47, 431 – 445.
7. **Shukla, U. K.**, Khan, Z. A. and Singh, I. B. (1996): Markov Chain Analysis of the shallow marine Bhuj Sandstone of Early Cretaceous age, Kachchh basin, India. *Journal Geological Society of India*, 48, 567 – 578.
8. Kotlia, B. S., **Shukla, U. K.**, Bhalla, M. S., Mathur, P. D. and Pant, C. C. (1997): Quaternary palaeoclimatic changes in the Lamayuru basin, Ladakh Himalaya: Preliminary multidisciplinary investigations. *Geological Magazine*, 134, 807 – 812.
9. Singh, I. B., **Shukla, U. K.** and Srivastava, P. (1998): Point bar complex of an exhumed channel in upland interfluvium of the Ganga Plain, India. *Journal Geological Society of India*, 51, 315 – 322.
10. Singh, I. B., Srivastava, P., Sharma, S., Sharma, M., Singh, D., Rajagopalan, G. and **Shukla, U. K.** (1999): Upland Interfluvium (Doab) deposition: Alternative model to muddy overbank deposition. *Facies*, 40, 197 – 210.
11. Pant, C. C. and **Shukla, U. K.** (1999): Nagthat Formation: an example of a progradational, tide dominated succession in Kumaun Lesser Himalaya, India. *Asian Journal of Earth Sciences*, 17, 353 – 368.
12. **Shukla, U. K.**, Singh, I. B., Srivastava, P. and Singh, D. (1999): Palaeocurrent patterns in braid bar and point bar deposits: example from Ganga River, India. *Journal of Sedimentary Research*, 69, 992 – 1002.
13. Srivastava, P., **Shukla, U. K.**, Mishra, P., Sharma, M., Sharma, S., Singh, I. B. and Singhvi, A. K. (2000). Luminescence chronology and facies development of Bhur sands in the interfluvium region of Central Ganga Plain, India. *Current Science*, 78, 498 – 503.
14. **Shukla, U. K.**, Singh, I. B., Sharma, S. and Sharma, M. (2001): A model of mega fan sedimentation, Ganga Plain, India. *Sedimentary Geology*, 144, 243 – 263.
15. **Shukla, U. K.**, Kotlia, B. S. and Mathur, P. D. (2002): Sedimentation pattern of intermountain Lamayuru Lake, North Western Ladakh. *Sedimentary Geology*, 148, 405 – 425.
16. Sharma, M., Sharma, S., **Shukla, U. K.** and Singh, I. B. (2002): Sandstone body architecture and stratigraphic trends in the Middle Siwalik succession of Jammu area, India. *Asian Journal of Earth Sciences*, 20, 817 – 828.
17. **Shukla U. K.** (2002): Facies Architecture of Quaternary Bhimtal-Naukuchiatal Lake, Nainital, India: A Palaeoclimatic Connotation. In: Aspects of Geology and Environment of the Himalaya, Eds. Pant C. C. and Sharma A. K. (*Gyanodaya Prakashan, Nainital, India*), 141 – 158.
18. **Shukla, U. K.** and Bora, D. S. (2003): Geomorphology and Sedimentology of Piedmont zone, Ganga Plain, India. *Current Science*, 84, 1034 – 1040.

19. Srivastava, P., Singh, I. B., Sharma, S., **Shukla, U. K.** and Singhvi, A. K. (2003): Late Pleistocene-Holocene hydraulic changes in the interfluvial areas of the central Ganga plain, India. *Geomorphology*, 54, 279 – 292.
20. **Shukla, U.K.** and Singh, I. B. (2004): Signature of Palaeofloods in sandbar-levee deposits, Ganga Plain, India. *Journal Geological Society of India*, 64, 455-460.
21. Bora, D. S. and **Shukla, U. K.** (2005): Petrofacies implication on the Lower Siwalik foreland basin evolution, Kumaun Himalaya, India. *Journal Palaeontological Society of India, Spec. Publ.*, 2, 163-179.
22. **Shukla, U. K.** and Bora, D. S. (2005): Sedimentation Model for the Quaternary intramontane Bhimtal-Naukuchiatal Lake deposits, Nainital, India. *Asian Journal of Earth Sciences*, 25, 837-848.
23. Agarwal, K. K. and **Shukla, U. K.** (2005): Deformational Pattern of Siwalik Sequence in Gaula River and Nihal Nadi sections, Kumaun Himalaya, Uttaranchal, India. *Journal Palaeontological Society of India, Spec. Publ.*, 2, 65-7.
24. Hauschke, N., **Shukla, U.K.** and Becker, A. (2005): The Middle Buntsandstein (Solling Formation, Chirotheriensandstein) in the Merkel quarry in Bernburg on the Saale (Sachsen Anhalt) – new investigations in a classical outcrop. *Hallesches Jarb. Geowiss*, 19, 119-126.
25. **Shukla, U. K.** (2006): Evidence of Palaeofloods in Ramnagar, Varanasi, India. *Jnana-Pravaha Bulletin.*, 9, 149-150.
26. **Shukla, U. K.**, Bachmann, G.H., Beutler, G., Barnasch, J. and Franz, M. (2006): Extremely distal fluvial sandstone within the Playa system of Arnstadt Formation (Norian, Late Triassic), central Germany. *Facies*, 52, 541-554.
27. **Shukla, U. K.** and Bachmann, G. H. (2007): Estuarine sedimentation in the Stuttgart Formation (Carnian, Late Triassic) South Germany. *N. Jb. Geol. Palaeont. Abh.*, 243, 305-323.
28. **Shukla, U. K.** and Srivastava, R. (2008): Lizard eggs from the late Cretaceous Lameta Formation of Jabalpur, central India with interpretation of depositional environments of nest-bearing horizon. *Cretaceous Research*, 29, 674-686.
29. **Shukla, U. K.** and Raju, N. J. (2008): Migration of Ganga River and its bearing on hydrological potential of Varanasi area, India. *Jour. Ear. Syst. Sci.*, 17 (4), 1-10.
30. **Shukla, U. K.** and Prakash, D. (2008): Activities of the North Indian Chapter of the Geological Society of India: Popularizing Geology. *Journal Geological Society of India*, 72, 579-580.
31. **Shukla, U. K.** (2009): Sedimentation model of gravel-dominated alluvial piedmont fan, Ganga plain, India. *International Journal of Earth Sciences*, 98, 443-459.
32. **Shukla, U. K.**, Bora, D. S. and Singh, C. K. (2009): Geomorphic positioning and depositional dynamics of palaeochannels in the Lower Siwalik Basin, Kumaun Himalaya, India. *Journal Geological Society of India*, 73, 335-354.

33. Srivastava, P. and **Shukla, U. K.** (2009): Quaternary Evolution of the Ganga River System: New Quartz Ages and a review of Luminescence Chronology. *Himalayan Geology*, 3(1), 85-94.
34. **Shukla, U. K.**, Singh, C. K. and D. S. Bora (2009): Palaeoclimatic response to Quaternary gravels: A source to sink perspective, Kumaun Himalaya, India. *Quaternary International*, 213, 33-43.
35. Srivastava, P. and **Shukla, U. K.** (2010): Climate control on erosion distribution over the Himalaya during past ~100 ka. *Geology*, August, e216.
36. **Shukla, U. K.**, Bachmann, G.H. and Singh I. B. (2010): Facies architecture and sedimentation pattern of the Mid-Carnian Stuttgart Formation (Schilfsandstein), central Germany, and its comparison with modern Ganges system, India. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 197, 110-128.
37. Omnath Saha, **Shukla, U. K.**, Rekha Rani (2010): Palaeoenvironmental implication of trace fossils in the Upper Cretaceous Lameta Beds of Jabalpur area, M. P., India. *Journal geological Society of India*, 73, 607-620.
38. Raju, N.J., **Shukla, U. K.** and Ram, P. (2011): Hydrochemistry for the assessment of groundwater quality in Varanasi: a fast-urbanizing centre in Uttar Pradesh, India. *Environmental Monitoring and Assessment*, 173, 279-300.
39. **Shukla, U. K.** and Bora, D. S. (2011): Distinction between interfluve (Doab) and sensu stricto active floodplain deposits of the Lower Siwalik Group of Kumaun Himalaya, India. In: *India, In: D.S. Singh and N. L. Chhabra (eds.) Geological Processes and Climate change, Mcmillan Pub., India*, 117-134.
40. Rekha Rani, **Shukla, U. K.**, Omnath Saha (2011): Lithofacies supported grain size analysis of Middle Siwalik succession of Mohand area, Dehradun valley, India: A Palaeoenvironmental implication. *Memoir of the Geological Society of India*, 77, 469 – 491.
41. **Shukla U. K.** Srivastava P. and Singh I. B. (2012): Migration of Ganga River and development of cliffs in Varanasi region during late Quaternary: Role of active tectonics. *Geomorphology*, 171-172, 101 – 113.
42. **Shukla, U.K.**, and Saha, O. (2012): Fossil Evidence for Dinosaur Egg Raider Lizards from Lametaghat, Jabalpur, Central India. *International Journal of Advances in Earth Sciences*, 1, (1), 9-12.
43. Prakash, D., Singh, C.K., **Shukla, U. K.**, Singh. P.C. and Deepak (2012): Tectonic significance of the area west of Kodaikanal (South India): Applying Remote Sensing and GIS techniques. *International Journal of Basic and Applied Sciences*, 1, 61-67.
44. **Shukla, U.K.** (2013): Varanasi and the Ganga River: A Geological Perspective. In V. Jayasawal (eds.) *Varanasi: Myths and Scientific Studies. Aryan Books International, New Delhi*, pp. 100-113.
45. Prakash, D., Singh, C.K., Chandra Singh, P., **Shukla, U.K.**, Deepak and Lal, S.N. (2013): Evidences of Fold Superimposition from Anakapalle, Eastern Ghats Mobile Belt, India *International Journal of Remote Sensing Application*, 3, 86-91.

46. Prakash, D., Singh, C.K., **Shukla, U.K.**, Singh, P.C., Singh, A. and Chandra, A. (2013): Structural and geomorphological evolution of the area around Narella, Andhra Pradesh: A study based on field work, GIS and Remote sensing. *International Journal of Remote Sensing Application*, 3, 24-32.
47. Verma, a., **Shukla, U.K.**, Adnan, A. and Shukla, T. (2013): Lithofacies, Petrography and Sedimentation of the Precambrian Upper Rewa Sandstone Formation of the Rewa Group, Vindhyan Basin, Son Valley, M. P., India. *Journal of Gondwana Geological Magazine*, 28(2), 101-111.
48. Shukla, T. and **Shukla, U.K.** (2013): Tidal bundles: An evidence of mixed tidal regime in Scarp Sandstone Formation of the Proterozoic Kaimur Group, Vindhyan Basin, Mirzapur district, (Uttar Pradesh), India. *Journal of Gondwana Geological Magazine* 28(2), 93-99
49. Jafarian, A., Ghazi, S., Adnan, A., **Shukla, U.K.** Wilmsen, M. and Sohn, Y.K. (2014): Palaeoenvironment and provenance of the Early Eocene arenaceous sequence of Neyshaboor, Binalud region, Iran. *Arabian Journal of Geosciences*, 7, 5455-5471.
50. Adnan, A. and **Shukla, U. K.** (2014): A case of normal regression with sea level transgression: Example from the Ganurgarh Shale, Vindhyan Basin, Maihar area (M.P.), India. *Journal Geological Society of India*, 84, 406-416.
51. Shukla, T., Verma, A., Adnan, A., Pandey, M. and **Shukla, U. K.** (2014): Scarp Sandstone: An example of estuarine sedimentation within the Mesoproterozoic Kaimur Group of the Vindhyan Basin, (Mirzapur, U.P.), India. *Journal of the Palaeontological Society of India*, 59 (1), 45-58.
52. Verma, A. and **Shukla, U.K.** (2015): Deposition of the Upper Sandstone Formation of Proterozoic Rewa Group of the Vindhyan Basin, M.P., India: A Reappraisal. *Journal Geological Society of India*, 86, 1-17.
53. Adnan, A., **Shukla, U.K.**, A. Verma, A. and Shukla, T. (2015): Lithofacies of transgressive–regressive sequence on a carbonate ramp in Vindhyan basin (Proterozoic): a case of tidal-flat origin from central India. *Arabian Journal of Geosciences*, 8, 8985-7001.
54. Chaudhary, S., **Shukla, U.K.**, Sundriyal, Y.P., Srivastava, P., and Jalal, P. (2014): Formation of palaeovalleys in central Himalaya during valley aggradation. *Quaternary International*, 371, 254-267.
55. Srivastava, R., Patnaik, R., Shukla, U.K. and Sahni, A. (2015): Crocodilian Nest in a Late Cretaceous Sauropod Hatchery: A Case of Possible Predation from the Type Lameta Ghat Locality, Jabalpur, India. *PLoS ONE*, 11(1), e0146736.
56. Ghosh, N., Basu, A.R., Bhargava, O.N., Shukla, U.K., Ghatak, A., Garziona, C.N., and Ahluwalia, A.D. (2016): Catastrophic environmental transition at the Permian-Triassic Neotethyan margin of Gondwanaland: geochemical, isotopic and sedimentological evidence in the Spiti Valley, India. *Gondwana Research*, 34, 324-345.
57. Prakash, K., Singh, S., Shukla, U.K. (2016): Morphometric changes of the Varuna river basin: Varanasi District, Uttar Pradesh. *Journal of Geomatics*, 10 (1), 48-54.

58. Ghosh, R., Sehgal, R.K., Srivastava, P., **Shukla, U.K.**, Nanda, A.C. and Singh. D.S. (2016): Discovery of *Elephas cf. Namadicus* from the Late Pleistocene strata of marginal Ganga Plain. **Journal Geological Society of India**, 88, 559-568.
59. Singh, P, Singh, D.S. and **Shukla, U.K.** (2018): Ganga: The Arterial River of India, **Springer**.
60. Garg, S., Shukla, A., Mehta, M., Kumar, V., Samuel, S.A., Bartarya, S.K., **Shukla, U.K.** (2018): Field evidences showing rapid frontal degeneration of the Kangriz glacier, western Himalayas, Jammu & Kashmir. **J. Mt. Sci.** 15(6): 1199-1208.
61. Ghosh, R., Srivastava, P., **Shukla, U.K.** Singh, I., Champati Rayc,P.K. Sehgal, R.K. (2018): Tectonic forcing of evolution and Holocene erosion rate of ravines in the Marginal Ganga Plain, India. **Journal of Asian Earth Sciences** 162, 137–147.
62. **Shukla, U.K.** and Bora D.S. (2019): The Lower Siwalik foreland basin sedimentation in the Kumaun Himalaya (India): A transition from megafan setting to incised valley fills. **Journal of Geodynamics**,129, 219-236.
63. Ghosh, R., Srivastava, P., **Shukla, U.K.**, Sehgal, R.K., Singh, I.B. (2019): 100 kyr sedimentary record of Marginal Gangetic Plain: Implications for forebulge tectonics. **Palaeogeography, Palaeoclimatology, Palaeoecology**,520, 78–95.
64. Singh, S., Prakash, K., **Shukla, U.K.** (2019). Decadal scale geomorphic changes and tributary confluences within the Ganga River valley in Varanasi region, Ganga Plain, India. **Quaternary International**,507, 124-133.
65. Rezei, R., Jafarian, A., Mattern, F., **Shukla, U.K.**, Senapathi, V., Bernecker, M. (2019). The sedimentology and development of a modern sandspit (Miankaleh Peninsula) and a lacustrine lagoon (Gorgan Bay), Caspian Sea, Iran. **Marine Geology**, 415, 105974.
66. Jalal, P., Pandey, J.B., Ahemad, S.M., Dutt, S., **Shukla, U.K.**, Maddodi, B., (2019). Effect of Deccan lavafloes on sedimentological evolution of Gurmatkal intertrappeans, Karnatka, South India. **Geological Journal**, 55(6), 4681-4690.
67. Garg, S., Shukla. A., Mehta, M., Kumar, V., **Shukla, U.K.**, (2019)On geomorphic manifestations and glaciation history of theKangriz glacier, western Himalaya. **Himalayan Geology**, 40 (2), 115-127.
68. Shukla, A., Siddhi, G., Kumar, V., Mehta, M., **Shukla, U.K.** (2020): Sensitivity of glaciers in part of the Suru basin, western Himalaya to ongoing climatic perturbations. **In: Himalayan Weather and Climate and its Impact on the Environment, (Dimri, A. P., (eds), Springer publication, 351-377 (https://doi.org/10.1007/978-3-030-29684-1_18)**
69. Sharma, C.P., Rawat, S.L., Srivastava, P., Meena, N.K., Agnihotri, R., Kumar, A., Chahal, P.,Gahlaud, S.K.S., **Shukla, U.K.** (2020) High resolution climate (monsoonal) variability constructed from a continuous 27000 year sediment record from NW Himalaya (Ladakh). **The Holocene**, 30 (3), 441-457.
70. Shukla. A., Garg, S., Mehta, M., Kumar, V., **Shukla, U.K.**, (2020) Temporal inventory of glaciers in the Suru sub-basin, western Himalaya: impacts of regional climatic variability. **Earth. Syst. Sci. Data**, 12, 1245-1265.

71. Verma, A., **Shukla, U.K.**, (2020) Heterolithic Lower Rewa Sandstone of the Neoproterozoic Rewa Group, Vindhyan Basin, U.P., India: An example of tidal point bar. *Precambrian Research*, 350, 105932.
72. Singh, S., Prakash, K., **Shukla, U.K.** (2020) Spatiotemporal Migration of the River Ganga in Middle Ganga Plane: Application of Remote Sensing and GIS Technique, *Journal of the Indian Society of Remote Sensing*, 48 (11), 1495-1507.
73. Pandey, M.; Ray, Y.; Arora, A.; **Shukla, U. K.**; Ranjan, S. (2021) Structural Control on the Landscape Evolution of Son Alluvial Fan System in Ganga Foreland Basin. In *Advances in Remote Sensing for Natural Resource Monitoring; Prem C. Pandey Laxmi K. Sharma, Ed.; Wiley, pp. 189–246*.
74. Arora, A., Arabameri, A., Pandey, M., Siddiqui, M., **Shukla, U.K.**, Bui, D.T., Misra, V.N., Bhardwaj, A., (2021) Optimization of state-of-the-art fuzzy-metaheuristic ANFIS-based machine learning models for flood susceptibility prediction mapping in the Middle Ganga Plain, India. *Science of Total Environment*, 750, 141565.
75. Biswal, S., Lokho, K., **Shukla, U.K.**, Whiso, K., Prakash, K., (2021) Eocene larger foraminiferal biostratigraphy, depositional history and paleogeography of the Sylhet Limestone of the Mikir Hills of Assam, NE India: Implications for an Open Tethys. *Micropaleontology*, 67 (5), 427–446.
76. Garg, S., Shukla, A., Garg, P.K., Yousuf, B., **Shukla, U.K.**, Lotus, S. (2021) Revisiting the 24 year (1994-2018) record of glacier mass budget in the Suru sub-basin, western Himalaya: Overall response and controlling factors. *Science of the Total Environment*, 800, 149533.
77. Dey, S., **Shukla, U.K.**, Mehrishi, P., Mall, R.K. (2021) Appraisal of groundwater potentiality of multilayer alluvial aquifers of the Varuna river basin, India, using two concurrent methods of MCDM. *Environment, Development and Sustainability*, 23 (12), 17558-17589.
78. Naik, A.S., Behera, B., **Shukla, U.K.**, Sahu, H.B., Singh, P.K., Mohanty, D., Sahoo, K., Chatterjee, D. (2021) Mineralogical Studies of Mahanadi Basin coals based on FTIR, XRD and Microscopy: A Geological Perspective. *Jour. Geol. Soc. Ind.*, 97, 1019-1027.
79. Ghosh, R., **Shukla, U.K.**, Srivastava, P., Sharma, A. (2021) Constraints of lithostratigraphy on the landscape evolution in response to erosion, climate and tectonics in the Marginal Ganga Plain, India. *Journal of Asian Earth Sciences*, 219, 104892.
80. Pandey, M., Arora, A., Arabameri, A., Costache, R., Kumar, N., Mishra, V.N., Nguyen, H., Mishra, J., Siddiqui, M.A., Ray, Y., Soni, S., Shukla, U.K. (2021). Flood Susceptibility Modeling in a Subtropical Humid Low-Relief Alluvial Plain Environment: Application of Novel Ensemble Machine Learning Approach. *Front. Earth Sci.* 9, 659296.
81. Siddhi, G., Shukla, A., Garg, P.K. Yousuf, B., **Shukla, U.K.** (2022). Surface evolution and dynamics of the Kangriz glacier, western Himalaya in past 50 years. *Cold Regions Science and Technology*, 196, 103496.
82. Khan, S., Farooqui, A., **Shukla, U.K.**, Grosfjeld, K., Knies, J., Prasad, V. (2022). Late Pliocene continental climate and vegetation variability in the Arctic-Atlantic gateway region prior to intensification of Northern Hemisphere glaciations. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 586, 110746.

83. Sharma, C.P., Chahal, P., Kumar, A., Singhal, S., Sundriyal, Y.P., Ziegler, A.D., Agnihotri, R., Wasson, R.J., **Shukla, U.K.**, Srivastava, P. (2022). Late Pleistocene–Holocene flood history, flood-sediment provenance and human imprints from the upper Indus River catchment, Ladakh Himalaya. *GSA Bulletin*, 134, 275-292.
84. Garg, S., Garg, P.K., Yousuf, B., Shukla, A., **Shukla, U.K.** (2022). Dulung Proglacial Lake, Suru Sub-Basin, Western Himalaya: Evolution, Controls and Impacts on Glacial Stability. *Frontiers in Environmental Science*, 10, 788359.
85. Mishra, A.K., Mohanty, R.B., Ghosh, R., Mishra, K., **Shukla, U.K.**, Kar, R. (2022). Modern pollen–vegetation relationships along an altitudinal transect in the Western Higher Himalaya, India: Palaeoclimatic and anthropogenic implications. *The Holocene*, 32, 835-852.
86. Maurya, S., Ghosh, R., Sehgal, R.K., Srivastava, P., **Shukla, U.K.**, Singh, A.P., Sarangi, S. (2022). Stable Isotopic studies of the herbivorous mammals from the Marginal Ganga Plain, India: implication for the paleo-environmental reconstruction. *Geological Journal*, 57, 3935-3948.
87. Saha, O. and **Shukla, U.K.** (2022). Discrimination of the lower and the upper Nimar Sandstone (Upper Cretaceous Group), M.P., India, on the basis of lithofacies and ichnofauna. *Journal paleontological Society of India*, 67, 41-55.
88. Biswal, S., Lokho, K., Needham, A., Bhandari, A., **Shukla, U.K.**, Whiso, K., Prakash, K. (2022). Record of Additional Middle Eocene Vertebrate Remains from the Mikir Hills, NE India: Implications on Paleoenvironment and Paleobiogeography. *International Journal of Geosciences*, 13, 609-626.
89. Pandey, M., Pandey, P.C., Ray, Y., Arora, A., Jawak, S.D., Shukla, U.K. (2022). The Three Poles: advances in Remote Sensing in Relation to Spheres of Planet Earth. In: *Advances in Remote Sensing Technology and the Three Poles* (eds) Pandey et al., (2023), John Wiley and Sons, pp. 1-13.
90. Deopa, T., Shukla, U.K., Pathak, B. (2023). Facies and genetic elements within the Late Miocene Middle Siwalik of the Himalayan foreland basin, India: A response of the fan building processes. *Sedimentary Geology*, 453, 106424.
91. Sharma, C.P., Kumar, A., Chahal, P., **Shukla, U.K.**, Srivastava, P., Jaiswal, M.K. (2023). Debris flow susceptibility assessment of Leh Valley, Ladakh, based on concepts of connectivity, propagation and evidenced-based probability. *Natural Hazards*, 115, 1833-1859.
92. Pathak, B. and **Shukla, U.K.** (2024). Sedimentation model for the Pinjor Formation of the Upper Siwalik, Dehradun Sub-basin, Garhwal Himalaya, India: A response of Climate and Tectonics, In: *The Role of Tropics in Climate Change* (Eds) N. Khare; Elsevier, pp. 273-294, <https://doi.org/10.1016/B978-0-323-99519-1.00011-9>.
93. Kumar, O.P., Naik, A.S., Gopinath, P., Subramani, T., Singh, V., Singhy, P.K., **Shukla, U.K.**, Prabhu, A. (2024). Petrographic and Geochemical analysis of Barmer Basin Paleogene lignite deposits: Insights into Depositional environment and palaeoclimate. *Journal of Geochemical Exploration*, 256, 107335.

94. Bhargava, O.N., Singh, B.P., Shukla, U.K., Ganai, J., Singh, P., Thorie, A., Mazumdar, P. (2024). Contributions to the Proterozoic–Phanerozoic successions in the Himalaya: Status report 2020-2024. *Proceedings of the Indian National Science Academy*, 1-15.
95. Yadav, M., Shukla, U. K., Gurumurthy, G. P., Ali, S., Kumar, K., & Sharma, A. (2024). Coupled role of climate and tectonics in the deposition of the late Quaternary sedimentary sequence in the southern margin of the central Ganga Plain, India. *Journal of Sedimentary Research*, 94(5), 559-578.

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