

DR. RAMESH KUMAR SEHGAL, WIHG, DEHRADUN, INDIA



RESEARCH GROUP:

BIOSTRATIGRAPHY

FIELD OF SPECIALIZATION:

BIOSTRATIGRAPHY AND VERTEBRATE PALEONTOLOGY OF THE SIWALIK GROUP

EDUCATION:

Details of educational qualifications starting from the most recent ones.

Class/Degree	Year	Division/%	Scholarship	Board/University
Ph.D. (Biostratigraphy)	1996	Awarded	-	HNB Garhwal University
M.Sc. (Geology)	1985	I (66.6%)	-	HNB Garhwal University
B.Sc.	1983	I (72.6%)	National Merit	HNB Garhwal University
Intermediate	1981	I (66.4%)	National Merit	U.P. Board, Allahabad
High School	1979	I (75.6%)	-	U.P. Board, Allahabad

PROFESSIONAL EXPERIENCE:

Details of professional experience starting from the most recent position.

- Scientist "E" w.e.f. September 2019
- Scientist "D" w.e.f. July 2015
- Scientist "C" w.e.f. July 2011
- Senior Technical Officer w.e.f. July 2009

- Technical officer w. e.f. July 2004
- Junior Technical officer w.e.f. 1999

VISITING POSITIONS: NIL

TEACHING EXPERIENCE:

SERVICES:

- a. Supervision/Guidance to Ph.D. Students:** One student submitted; one student pursuing
- b. Training:** Dissertation/summer/winter training to 9 students
- c. Teaching:**
- d. Membership:** Nil
- e. Editorial Board:** Nil
- f. International/National Seminars/Workshop:** GEOSAS- 1995, Sri Lanka
- g. External Research Fund received & Project Handled:** Nil
- h. Member of important Committees:** Nil

AWARDS/FELLOWSHIPS/HONORS/MEMORIAL LECTURES:

- a. Awards/Medals/Prizes:**
Best Worker Award of WIHG 1989
- b. Fellowships:** Nil
- c. Memorial Lectures:**
- d. Recognition/Honors:**

COUNTRIES VISITED: SRI LANKA

NATIONAL/INTERNATIONAL (outside WIHG) COLLABORATION:

**American Museum of Natural History, USA
Arizona State University< USA
Panjab University, India
Lucknow University, India
Banaras Hindu University, India**

Inside WIHG Collaborator:

Scientists from Sedimentology and Geochemistry Group of WIHG

Patent - Nil

Scholarships awarded, gate

Ph.D. Advisor:

LIST OF PUBLICATIONS

(a) SCI Papers

Published Research Papers

1. Gilbert, C. C., **Sehgal, R. K.**, Pugh, K. D. Campisano, C. J. May, E., Patel, B. A. and Patnaik, R. 2019. New *Sivapithecus* specimen from Ramnagar (J & K), India and a taxonomic revision of Ramnagar hominoids. *Journal of Human Evolution*. Vol. 135, 102665
2. Ghosh, R., Srivastava, P., Shukla, U. K., **Sehgal, R. K.** and Singh, I. B. 2019. 100 kyr sedimentary record of Marginal Gangetic Plain: Implications for forebulge tectonics. *Palaeogeography, Palaeoclimatology, Palaeoecology*, vol. 520, pp. 78-95.
3. Nanda, A.C., **Sehgal, R. K.** and Chauhan, P.R. 2018. Siwalik-age faunas from the Himalayan Foreland Basin of South Asia. *Journal Asian Earth Sciences*, vol. 162, pp.54-68.
4. Ghosh, R., Srivastava, P., Shukla, U. K., Rawat, I., Champati Ray, P. K., **Sehgal, R. K.** 2018. Evolution and Holocene erosion rate of ravines in the Marginal Ganga plain, India. *Journal Asian Earth Sciences*, vol.162, pp. 137-147.
5. Kotla, S. S., Patnaik, R., **Sehgal, R. K.**, Kharya. A. 2018. Isotopic evidence for ecological and climate change in the richly fossiliferous Plio-Pleistocene Upper Siwalik deposits exposed around Chandigarh, India. *Journal Asian Earth Sciences*, vol. 163, pp. 32-42.
6. 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*, vol. 88. Nov. 2016, pp. 559-568.

7. Nanda, A. C. and **Sehgal, R. K.** 2015. Uplift-denudation of Himalaya: evidence from Cenozoic mammalian faunas. In: Siwalik Mammalian faunas of the Himalayan foothills (chapter 9). WIHG Monograph Series, No. 2, pp.143-153.
8. **Sehgal, R. K.** 2015. Mammalian faunas from the Siwalik sediments exposed around Nurpur, District Kangra (H.P.): age and palaeobiogeographic implications. *Himalayan Geology*, vol. 36 (1), pp. 9-22.
9. **Sehgal, R.K.** and Bhandari, A. 2014. Miocene mammals from India: Present status and future prospects. *Journal of the Palaeontological Society of India*, special publ. No. 5, pp. 325-333.
10. **Sehgal, R. K.** 2013. Revised mammalian biostratigraphy of the Lower Siwalik sediments of Ramnagar (J. & K.), India and its faunal correlation. *Journal of the Palaeontological Society of India*, vol. 58(1). Pp. 87-92.
11. **Sehgal, R. K.** and Patnaik, R. 2012. New muroid rodent and *Sivapithecus* dental remains from the Lower Siwalik deposits of Ramnagar (J. & K., India): Age implication. *Quaternary International*, vol. 269, pp. 69 – 73.
12. **Sehgal, R. K.** 2009. Siwalik Group. In D.S.N. Raju and Ravi Misra (eds.) *Proterozoic and Phanerozoic Integrated Stratigraphy (South- East Asia)*, *ONGC Bulletin*, vol. 44(2), pp. 243-247.
13. Nanda, A. C. and **Sehgal, R. K.** 2007. Geology and mammalian fauna of the Siwalik Group of Northwestern Himalaya: recent investigations In: Sankhyan, A.R. & Rao, V.R. (eds.), *Human Origins, Genome & People of India. Genomic, Palaeontological and Archaeological Perspectives*. Allied Publishers Pvt. Ltd., New Delhi, pp. 77 – 90.
14. Nanda, A.C. and **Sehgal, R. K.** 2005. Recent Advances in palaeontologic and magnetostratigraphic aspects of the Siwalik Group of Northwestern Himalaya. *Himalayan Geology*, vol. 26 (1), pp. 93 – 102.
15. Guleria, J.S., Srivastava, Rashmi, Nanda, A.C. and **Sehgal, R. K.** 2005. Two fossil woods from the Siwalik Subgroup of Northwestern Himalaya. *Journal of Geological Society of India*, vol. 66, pp. 609 – 616.
16. Nanda, A.C. and **Sehgal, R. K.** 2005. Some faunal discrepancies and recent advances in the stratigraphy of the Siwalik Group of Northwestern Himalaya. In D. S. N. Raju et al. (Eds.). *An overview of litho- bio- chrono sequence stratigraphy and sea level changes of Indian*

sedimentary basins. *Bulletin of Association of Petroleum Geologists*, Special Publication no. 1, pp. 86 – 91.

17. **Sehgal, R. K.** and Nanda, A. C. 2002. Age of the Siwalik sediments exposed in the vicinity of Nurpur, Kangra (H. P.), India. *Current Science*, vol. 82(4), pp. 392 – 395.
18. **Sehgal, R. K.** and Nanda, A. C. 2002. Palaeoenvironment and palaeoecology of the Lower and Middle Siwalik subgroups of a part of Northwestern Himalaya, India. *Journal of Geological Society of India*, vol. 59, pp. 517 – 529.
19. **Sehgal, R. K.** and Nanda, A. C. 2002. Age of the Siwalik sediments exposed in the vicinity of Nurpur, Kangra (H. P.), India. *Current Science*, vol. 82(4), pp. 392 – 395.
20. Anantharaman, M. S. and **Sehgal, R. K.** 2000. A Geomorphological appraisal of Landslides in Garhwal and Kumaun Himalaya (U.P.). Chapter 2 In: *The Himalayan Environment: Issues and Challenges* (eds. Puran Ch. Pande, Ravindra K. Pande and Rajnish Pande), Datta Publishing House, New Delhi, pp. 170 – 176
21. Anantharaman, M. S. and **Sehgal, R. K.** 2000. Water resources, their depletion and conservation in the Dehra Dun Valley. Chapter 15 In: *The Himalayan Environment: Issues and Challenges* (eds. Puran Ch. Pande, Ravindra K. Pande and Rajnish Pande), Datta Publishing House, New Delhi, pp. 8 – 23
22. **Sehgal, R.K.** 1998. Lower Siwalik carnivores from Ramnagar (J.&K.). *Himalayan Geology*, vol.19 (1), pp. 109-118
23. Nanda, A.C. and **Sehgal, R.K.** 1993. Siwalik mammalian faunas from Ramnagar (J. & K.) and Nurpur (H.P.) and lower limit of Hipparion. *Journal of Geological Society of India*, vol. 42, pp. 115 -134

ABSTRACTS

1. **R. K. Sehgal.** 2018. National Conference on Earth System Science with special reference to Himalaya: Advancement and Challenges during May 16-18, 2018 at WIHG (Golden Jubilee Seminar)
2. **R. K. Sehgal.** 2018. WIHG Museum- History and collections, Brain Storming meet on establishment of The Indian Museum of Earth, 10-11 Sept. 2018, INSA Delhi (Oral presentation)

3. **R. K. Sehgal.** 2018. Recent advancements in the palaeontologic and stratigraphic studies of the Siwalik group of Northwestern Himalaya. Workshop on National project Siwalik Excavations, 30 – 31 January 2018, Anthropological Survey of India, Dehradun
4. **R. K. Sehgal.** 2017. On the status of the red bed successions exposed at the base of the Siwalik Group of NW India and palaeobiogeographic significance of the Siwalik faunas. National Workshop on Indian Siwalik: Recent Advances and Future Research, 21-22 June 2017, Geological Survey of India, Lucknow.
5. **Sehgal, R. K.** 2017. Cenozoic mammalian dispersal patterns and its relation to uplift of the Himalaya. International Conference on Emergence and Evolution of the Indian Foreland Basin, November 18-29, Panjab University, Chandigarh, Abstract volume, p.16
6. Kotla, S. S., Patnaik, R., **Sehgal, R. K.** and Kharya, A. 2017. Palaeoclimate and Palaeovegetation changes across the Plio-Pleistocene Upper Siwalik sequences exposed along the Ghaggar River Section (Panchkula, Haryana). International Conference on Emergence and Evolution of the Indian Foreland Basin, November 18-29, Panjab University, Chandigarh, Abstract volume, p.23
7. Kotla, S. S., Patnaik, R., **Sehgal, R. K.** and Kharya, A. 2017. Stable Isotope (carbon and oxygen) and palaeontological studies of an early Pleistocene site (~ 1.8 Ma) of Pinjor Formation exposed near Panchkula (Haryana) indicates existence of C4 vegetation and Palearctic conditions. International Conference on Emergence and Evolution of the Indian Foreland Basin, November 18-29, Panjab University, Chandigarh, Abstract volume, p.84
8. Kotla, S. S., Patnaik, R., **Sehgal, R. K.** and Kharya, A. 2016. Fossil gastropods from the Indian Upper Siwaliks and their stable carbon and oxygen isotope values indicate presence of cold climatic conditions in the Early Pleistocene. Geophysical Research Abstracts Vol. 18, European Geosciences Union (EGU2016), Vienna, Austria.
9. Ghosh, R., Srivastava, P., Shukla, U.K., **Sehgal, R.K.**, and Islam, R. . 2016. Fluvial architecture during Late Pleistocene in the Southern Ganga Foreland Basin: Implication to peripheral bulge tectonics. 32nd International Meeting of Sedimentologists (32nd IAS). Morocco.

10. Kotla, S. S., Patnaik, R., **Sehgal, R. K.** and Kharya, A. 2016. Fossil gastropods from the Indian Upper Siwaliks and their stable carbon and oxygen isotope values indicate presence of cold climatic conditions in the Early Pleistocene. *Geophysical Research Abstracts* Vol. 18, European Geosciences Union (EGU2016), Vienna, Austria.
11. **Sehgal, R. K.** 2015. Cenozoic mammalian dispersal patterns indicate significant uplift of the Himalaya between 10-8 Ma. 30th Himalaya-Karakoram-Tibet Workshop, Dehradun, p. 255.
12. Kotla, S. S., Patnaik, R., **Sehgal, R. K.** and Kharya, A. 2015. Stable isotopic studies of the early Pleistocene pedogenic nodules and gastropod shell from the Pinjor Formation of the Upper Siwalik Subgroup exposed in the vicinity of Panchkula (Haryana). 30th Himalaya-Karakoram-Tibet Workshop, Dehradun, p. 45.
13. Ghosh, R., Srivastava, P., Shukla, U.K., **Sehgal, R.K.**, Islam, R. and Srivastava, P. 2015. Late Quaternary fluvial deposits and landscape evolution along the Yamuna River: Implications to peripheral forebulge tectonics of Ganga plains. 30th Himalaya-Karakoram-Tibet Workshop, Dehradun, p. 46.
14. **Sehgal, R.K.** 20015. Some additional mammalian fauna from the Middle Siwalik sediments of Nurpur, Kangra (H.P), India and its palaeobiogeographic analysis. *International Seminar on Northward Flight of India in the Mesozoic – Cenozoic: Consequences on Biotic Changes and Basin Evolution*, Lucknow University, p.50.
15. An abstract was contributed to the XXIV ICMS held at WIHG, Nov. 2013 entitled “*Stratigraphic correlation of the Ramnagar faunal assemblage (Lower Siwalik) with its equivalents in the other parts of the world*”. Abstract volume, p. 131.
16. Nanda, A.C. and **Sehgal, R.K.** 2004. Recent advances in Palaeontologic and Magnetostratigraphic aspects of the Siwalik Group of Northwestern Himalaya. *Workshop on Indian Geotransects*, WIHG, Dehra Dun, p. 15.
17. Nanda, A.C. and **Sehgal, R.K.** 2004. Recent advances in the Siwalik Group of northwestern Himalaya : Palaeontologic and magnetostratigraphic aspects. *Sem. Recent Advances in Himalayan Geology with special reference to the NW Himalaya*, Panjab University, Chandigarh, p. 62.
18. **Sehgal, R.K.** and Nanda, A.C. 2001. Biogeography and migration of the Middle Siwalik faunas of the Indian subcontinent. *Sem. Contri. Him Geol*, Dehra Dun, p12

19. **Sehgal, R.K.**, 1999. Non-endemic behaviour of the Siwalik faunas. An example from a Lower Siwalik locality in India. *Third South Asia Geological Congress*, Pakistan
20. **Sehgal, R.K.**, 1998. Palaeoecology of the Lower Siwalik sediments of Ramnagar (J. & K.), India. *Workshop on Himalayan Foreland Basin with special reference to pre- Siwaliks*, Jammu, pp. 67-68
21. **Sehgal, R.K.**, 1997. Mammalian faunas from Lower Siwalik sediments of Ramnagar (J. & K.) and its correlation. *Third GEOSAS Workshop on the Siwaliks of South Asia*, Islamabad, Pakistan, pp.63-64
22. **Sehgal, R.K.**, 1997. Biostratigraphy and faunal correlation of the Middle Miocene Siwalik sediments of Ramnagar (J.& K.), India. *3rd Pakistan Geol. Congress*, Peshawar, Pakistan, p. 56
23. Nanda, A.C. & **Sehgal, R.K.**, 1995. Some recent observations on the Siwalik faunas of India and associated lithological boundaries. *Symp. Recent Advances in Geological Studies of NW Himalaya and the Foredeep. Geol. Surv. Of India*, Lucknow.
24. **Sehgal, R.K.**, 1995. Mammalian faunas and time transgressive behaviour of the Siwalik sediments around Kangra (H.P.), India. *GEOSAS-II*, Srilanka, p.174
25. **Sehgal, R.K.** & Nanda, A.C. 1994. Biostratigraphy of the Lower Siwalik sediments of Ramnagar (J.& K.) and its correlation with other red bed sequences. *9th HKT*, Nepal, p.119
26. Nanda, A.C. & **Sehgal, R.K.**, 1993. Stratigraphic positions of certain Siwalik exposures of NW Himalaya - some observations. *Sem Him. Geol. Geophy.*, Dehra Dun, pp. 68-69.
27. Nanda, A.C. and **Sehgal, R.K.** 1992. Siwalik faunas and their relationship with lithological boundaries – some observation. *29th I.G.C.*, Japan.
28. **Sehgal, R.K.** 1991. Carnivore remains from the Siwalik sediments of Ramnagar (J. & K.) and Nurpur (H.P.), India. *Birbal Sahni Birth Cent. Sym. on the Siwalik Basin*, Dehra Dun
29. Nanda, A.C. and **Sehgal, R.K.** 1990. Biostratigraphic correlation of the Siwalik mammalian faunas from Ramnagar (J. & K.) and Nurpur with special reference to the lower limit of Hipparion in Indian subcontinent. *Sem. Him. Geol.*, Dehra Dun, pp. 84-85
30. **Sehgal, R.K.** and Anantharaman, M.S., 1987. A Geomorphological appraisal of landslides in Garhwal and Kumaun Himalaya. *6th I.G.C.*, Roorkee, pp. GT-10
31. Anantharaman, M.S. and **Sehgal, R.K.** 1987. Water resources, their depletion and conservation in Dehra Dun Valley, Garhwal Himalaya. *6th I.G.C.*, Roorkee, GT-6

