

# VIVESH VIR KAPUR Ph.D. (Earth Sciences)

SCIENTIST - 'D'

BIRBAL SAHNI INSTITUTE OF PALAEOSCIENCES(BSIP), LUCKNOW, INDIA HON. ASSOCIATE PROFESSOR

Academy of Scientific & Innovative Research
(AcSIR), India.

## RESEARCH INTERESTS

Mesozoic-Cenozoic faunal
remains in the context of origin, evolution,
palaeoecology, palaeoenvironment,
and biostratigraphy while highlighting the
historical biogeographic aspects in
a changing climatic and geodynamic setting
linked to India-Eurasia collision.
Study ichnofossils (e.g., coprolites) to
decipher dietary habit(s) of
pre-historic fauna and to reconstruct
surrounding habitat(s)

#### MAIN INTERESTS

- ✓ Vertebrate Palaeontology
- Origin and Evolution of fossil mammals
- √ Ichnofossils (coprolites)
- Palaeobiogeography
- Palaeoecology
- ./ Palaeoenvironment
- Science writing, editing, and reviewing

#### CONTACT INFORMATION

- 0091-9554430666
- viveshkapur@gmail.com
- viveshvir\_kapur@bsip.res.in
- R<sup>6</sup> https://www.researchgate.net/profile/Vivesh\_Kapur
- in https://www.linkedin.com/in/vivesh-v-kapur-9b185119
- 53, University Road, Lucknow, Uttar Pradesh 226007, INDIA

#### ACADEMIC HISTORY

# Doctor of Philosophy - Ph.D. (Palaeontology/Earth Sciences

October 2006 - Department of Earth Sciences, Indian Institute of Technology Roorkee, Uttarakhand, INDIA

#### M.Sc. (Honours School) in Geology

September 2002 - Centre of Advanced Studies in Geology, Panjab University, Chandigarh (U.T.), INDIA

#### B.Sc. (Honours School) in Geology

July 2000 - Centre for Advanced Studies in Geology, Panjab University, Chandigarh (U.T.), INDIA

#### RESEARCH/TEACHING CAREER

Hon. Associate Professor (Physical Sciences)
September 2022 to present - Academy of Scientific & Innovative Research (AcSIR), INDIA

#### SCIENTIST - 'D'

January 2021 to present - Birbal Sahni Institute of Palaeosciences, Lucknow, Uttar Pradesh, INDIA

Hon. Assistant Professor (Physical Sciences)
2019 to September 2022 - Academy of Scientific &
Innovative Research (AcSIR), INDIA

#### SCIENTIST - 'C'

January 2017 to December 2020 - Birbal Sahni Institute of Palaeosciences, Lucknow, Uttar Pradesh, INDIA

#### SCIENTIST - 'B'

October 2013 to December 2016 - Birbal Sahni Institute of Palaeosciences, Lucknow, Uttar Pradesh, INDIA

#### YOUNG SCIENTIST - DST PROJECT

July 2013 to October 2013 - Department of Geology, Centre for Advanced Studies, University of Delhi, Delhi, INDIA

### **ASSISTANT PROFESSOR (On Contract)**

August 2011 to September 2011 - Department of Geology, Centre for Advanced Studies, Kurukshetra University, Haryana, INDIA

#### SENIOR RESEARCH FELLOW (CSIR)

March 2006 to October 2006 - Department of Earth Sciences, Indian Institute of Technology Roorkee, Uttarakhand, INDIA

#### JUNIOR RESEARCH FELLOW (DST)

January 2003 to March 2006 - Department of Earth Sciences, Indian Institute of Technology Roorkee, Uttarakhand, INDIA

## INDUSTRY CAREER

#### **GEOLOGIST**

September 2008 to April 2011 & October 2011 to July 2013 - Geotechnical Observations Limited, Surrey, UNITED KINGDOM

#### **GEOLOGIST**

December 2006 to October 2007 - Fugro Geotech Limited, Mumbai, INDIA

#### SPONSORED PROJECTS

# **Co-PRINCIPAL INVESTIGATOR**

January 2023 to January 2026 (ongoing) - Science and Engineering Research Board (SERB) sponsored Core Research Grant (CRG) project titled "Palaeodietary habit(s) in deep time, linkages to producer taxa, and palaeoenvironmental inferences utilizing Mesozoic-Cenozoic fossilized faecal matter (coprolites) from India"

#### PRINCIPAL INVESTIGATOR

January 2020 to June 2023 - Science and Engineering Research Board (SERB) sponsored Core Research Grant (CRG) project titled "Palaeodietary habit(s) in deep time, linkages to producer taxa, and palaeoenvironmental inferences utilizing Mesozoic-Cenozoic fossilized faecal matter (coprolites) from India"

#### PRINCIPAL INVESTIGATOR

July 2013 to March 2017 (Completed) - Science and Engineering Research Board (SERB) sponsored Fast Track Project titled "Palaeogene vertebrate fauna from lignite-associated sedimentary sequences of western India: investigations of evolutionary and biogeographic aspects".

#### **PUBLICATIONS**

Arora P, Trivedi PM, Bhatia H, Agnihotri P, Kapur VV\*. 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). DOI:10.1007/s12371-023-00877-y.

Uddandam PR, Kapur VV\*, Parmar S, Bansal M, Manoj MC, Sharma A, Prasad V. 2023. Danian-Ypresian dinocyst biostratigraphy, fish fauna and depositional environment of the Akli Formation, Barmer Basin, western India. Historical Biology. DOI: 10.1080/08912963.2023.2214585.

Kapur VV\*, García Yelo BA, Thakkar MG. 2023. Development of Cenogram Technique Over the Past Six Decades with Some Insights into the Varied Habitats Occupied by Diverse Mammalian Communities Across Spain, China, and India Transiting the Middle Miocene Climatic Optimum. In: Phartiyal, B., Mohan, R., Chakraborty, S., Dutta, V., and Gupta, A.K. (Eds.). Climate Change and Environmental Impacts: Past, Present and Future Perspective. Society of Earth Science Series. Springer International Publishing, Springer Nature Switzerland AG.

# **PUBLICATIONS**

Kapur VV\*, Kumar K, Pandya PJ, Ghosh AK, Chakraborty A, Sharma A, Chauhan G, Thakkar MG. 2022. Oldest Asian Record of Snapping Shrimps (Alpheidae) from Kutch Basin, Western India and Associated Biota: Biostratigraphic, Palaeoenvironmental and Palaeoecological Significance. Acta Geologica Sinica - English Edition. https://doi.org/10.1111/1755-6724.14951

Prasanna K, Kapur VV. 2022. Oxygen Isotopic Studies of a Species of *Pitar* (*Hyphantosoma*) from Quilon Formation, Kerala, Southwest India: Inferences on Seasonality during the Miocene (late Burdigalian). Journal of the Geological Society of India. 98: 843-850.

Kapur VV, Carolin N, Bajpai S. 2022. Early Paleogene mammal faunas of India: a review of recent advances with implications for the timing of initial India-Asia contact. Himalayan Geology. 43(1B): 337-356.

Prasanna K, Ghosh P, Eagle RA, Tripati A, Kapur VV, Feeney RF, Fosu BR, Mishra D. 2021. Temperature Estimates of Lower Miocene (Burdigalian) Coastal Water of Southern India Using a Revised Otolith "Clumped" Isotope Paleothermometer. Geochemistry, Geophysics, Geosystems 22: e2020GC009601.https://doi.org/10.1029/2020GC009601

Phartiyal B, Kapur VV, Nag D, Sharma A. 2021. Spatio-temporal climatic variations during the last five millennia in the Ladakh Himalaya (India) and its links to archaeological finding(s) (including coprolites) in a palaeoecological and palaeoenvironmental context: A reappraisal. Quaternary International. 599: 32-44.

Kapur VV, Pickford M, Chauhan G, Thakkar MG. 2021. A Middle Miocene (~14 Ma) vertebrate assemblage from Palasava, Rapar Taluka, Kutch (Kachchh) District, Gujarat State, western India. Historical Biology. 33(5): 595-615. DOI: 10.1080/08912963.2019.1648451.

Kapur VV, García Yelo BA, Morthekai P. 2020. Cenogram analyses as habitat indicators for the Paleogene-Neogene mammalian communities across the globe, with an emphasis on the early Eocene Cambay Shale mammalian community from India. Journal of Iberian Geology. DOI: 10.1007/s41513-020-00131-2.

Kapur VV. 2020. Size variation amongst non-volant mammals from the Early Eocene Cambay Shale deposits of western India: Paleobiogeographic implications. In: Prasad, G.V.R. and Pattnaik, R. (Eds.). Biological Consequences of Plate Tectonics: New Perspectives on Post-Gondwanaland Break-up - A Tribute to Ashok Sahni. Vertebrate Paleobiology and Paleoanthropology, Springer International Publishing, Springer Nature Switzerland AG. DOI: 10.1007/978-3-030-49753-8.

Kapur VV, Kumar K, Morthekai P, Chaddha AS. 2020. Palaeodiet of Miocene producer(s) and depositional environment(s): inferences from the first evidence on microcoprolites from India. Acta Geologica Sinica - English Edition. 94(5): 1574-1590. DOI: 10.1111/1755-6724.14293.

Shah SK, Kapur VV, Manoj MC, Srivastava J, Prasad V. 2020. Recent Advancement(s) at the Birbal Sahni Institute of Palaeosciences, Lucknow: An Overview. Proceedings Indian National Science Academy (PINSA). 86(1).

Bajpai S, Kapur VV. 2020. India's geodynamic evolution during the Eocene: perspectives on the origin and early evolution of modern mammal orders. Episodes. 43(1): 489-497. DOI:10.18814/epiiugs/2020/020031.

Kapur VV, Khosla A, Tiwari N. 2019. Paleoenvironmental and paleobiogeographical implications of the microfossil assemblage from the Late Cretaceous intertrappean beds of the Manawar area, District Dhar, Madhya Pradesh, Central India. Historical Biology.31(9):1145-1160. DOI:10.1080/08912963.2018.1425408.

**Kapur VV**, Khosla A. 2019. Faunal elements from the Deccan volcano-sedimentary sequences of India: a reappraisal of biostratigraphic, palaeoecologic, and palaeobiogeographic aspects. Geological Journal. 54:2797-2828. DOI: 10.1002/gj.3379.

Retallack GJ, Bajpai S, Liu X, Kapur VV, Pandey SK. 2018. Advent of Strong South Asian Monsoon by 20 Million Years Ago. The Journal of Geology. 126: 1-24.

Kapur VV, Das DP, Bajpai S, Prasad GVR. 2017. First mammal of Gondwanan lineage in the early Eocene of India. Comptes Rendus Palevol. 16: 721–737.

Agarwal S, Verma P, Rao MR, Garg R, Kapur VV, Bajpai S. (2017). Lignite deposits of the Kutch Basin, western India: carbon isotopic and palynological signatures of the early Eocene hyperthermal event ETM2. Journal of Asian Earth Sciences. 146: 296-303.

**Kapur VV.** 2017. Digital imaging and computed tomography. Current Science. 112(7): 1317.

Kapur VV, Khosla A. 2016. Late Cretaceous terrestrial biota from India with special references to vertebrates and their implications for biogeographic connections. In. Khosla, A. and Lucas, S.G. (Eds.) Cretaceous Period: Biotic Diversity and Biogeography. New Mexico Museum of Natural History and Science Bulletin 71. pp. 161–172.

Kapur VV, Bajpai S. 2015. Oldest South Asian tapiromorph (Perissodactyla, Mammalia) from the Cambay Shale Formation, western India, with comments on its phylogenetic position and biogeographic implications. The Palaeobotanist. 64: 95-103.

Kapur VV, Pandey SK, Mishra SR. 2015. Palaeogene of the Indian Subcontinent. Current Science. 109 (5): 848-849.

Prasad V, Singh IB, Bajpai S, Garg R, Thakur B, Singh A, Saravanan N, Kapur VV. 2013. Palynofacies and sedimentology based high-resolution sequence stratigraphy of the lignite-bearing muddy coastal deposits (early Eocene) in the Vastan Lignite Mine, Gulf of Cambay, India. Facies. 59(4): 737-761.

Bajpai S, Kapur VV, Thewissen JGM. 2009. Creodont and Condylarth from the Cambay shale (earliest Eocene ~55-54 Ma) Vastan lignite mine, Gujarat, western India. Journal of Paleontological Society of India. 54(1): 103-109.

Bajpai S, Kapur VV. 2009. Earliest Cenozoic frogs from the Indian Subcontinent: Implications for out-of-India hypothesis. Journal of Paleontological Society of India. 53(1): 65-71.

Bajpai S, Kay RF, Williams BA, Das DP, Kapur VV, Tiwari BN. 2008. The Oldest Asian Record of Anthropoidea. Proceedings of the National Academy of Sciences (PNAS), USA. 105(32): 11093-11098.

Bajpai S, Kapur VV, Das DP, Tiwari BN. 2007. New early Eocene primate (Mammalia) from Vastan lignite Mine, District Surat (Gujarat), western India. Journal of the Palaeontological Society of India, 52(2): 231-234.

Bajpai S, Das DP, Kapur VV, Tiwari BN, Srivastava, S S. 2007. Early Eocene rodents (Mammalia) from Vastan lignite mine, Gujarat, western India. Gondwana Geological Magazine, 22(2):91–95.

Kapur VV, Bajpai S, Sarvanan N, Das DP. 2006. Vertebrate fauna from Deccan Intertrappean beds of Bhanpura, Mandsaur District, Madhya Pradesh. Gondwana Geological Magazine. 21 (1): 43-46.

Bajpai S, Thewissen JGM, Kapur VV, Sahni A, Tiwari BN. 2006. Eocene and Oligocene Sirenia (Mammalia) from Kachchh (India). Journal of Vertebrate Paleontology. 26(2): 400-410.

Bajpai S, Kapur VV, Thewissen JGM, Das DP, Sharma R, Tiwari BN. 2006. New Early Eocene cambaytheres (Perissodactyla, Mammalia) from the Vastan lignite mine (Gujarat, India) and an evaluation of cambaythere relationships. Journal of Paleontological Society of India. 51(1): 101-110.

Bajpai S, Kapur VV, Thewissen JGM, Das DP, Tiwari BN, Sharma R, Sarvanan N. 2005. Early Eocene Primates from Vastan lignite mine, Gujarat, western India. Journal of Paleontological Society of India. 50(2): 143-154.

Bajpai S, Kapur VV, Thewissen JGM, Tiwari BN, Das DP. 2005. First fossil marsupials from India: Early Eocene Indodelphis n.gen and Jaegeria n.gen. from Vastan lignite mine, district Surat, Gujarat. Journal of Paleontological Society of India. 50(1): 147-151.

Bajpai S, Kapur VV, Das DP, Tiwari BN, Sarvanan N, Sharma R. 2005. Early Eocene land mammals from Vastan lignite mine, district Surat (Gujarat), western India. Journal Paleontological Society of India 50(1): 101-113.

Bajpai S, Mohabey DM, Kapur VV, Sharma R. 2004. A late Cretaceous (Maastrichtian) freshwater Ostracoda fauna from Deccan Inter-trap sediments from Phulsagar, Mandla District, Madhya Pradesh. Gondwana Geological Magazine. 19(2): 147–157.

Bajpai S, Kapur VV. 2004. Oldest known gobiids from Vastan lignite mine (early Eocene), Surat district, Gujarat. Current Science. 87(4): 433-435.

Khosla A, Kapur VV, Sereno PC, Wilson JA, Wilson GP, Dutheil D, Sahni A, Singh MP, Kumar S, Rana RS. 2003. First dinosaur remains from the Cenomanian-Turonian Nimar sandstone (Bagh Beds), District Dhar, Madhya Pradesh, India. Journal of Paleontological Society of India. 48:115-127.

# RECENT CONFERENCES ATTENDED AND PUBLISHED ABSTRACTS

Domning DP, Bajpai S, and Kapur VV. (2021). Biotic evolution and biogeography during the Neogene in South Asia: Sirenians and Seagrasses. Online NECLIME international conference "Neogene Climate Evolution in Asia", 7-9 September, 2021. pp. 25-26, Abstracts.

Sagar R, Kapur VV, Kumar K, Morthekai P, Sharma A, Chauhan G and Thakkar MG. (2021). Preliminary data on coprolites from the Neogene (Miocene: Aquitanian-Burdigalian) Khari Nadi and Chassra formations, Kutch Basin, western India. Online NECLIME international conference "Neogene Climate Evolution in Asia", 7-9 September, 2021. pp. 43-44, Abstracts.

Kapur VV and García Yelo BA. 2020. Cenograms technique: Historical review of cenogram methodology tool for environmental as а reconstructions sustained by several mammalian communities across the globe during the Cenozoic time-slice. SES International Virtual Conference on 'Earth's Changing Climate: Past, Present & Future' 15-17 October, 2020. Pg 2, Abstract.

Kapur VV, Sharma A, Kumar M, Srivastava G, Agrawal S and Tiwari N. 2019. Charophyte gyrogonites and associated faunal biota from the ?Oligocene-Miocene Ladakh Molasse (Kargil Formation), Ladakh, Jammu & Kashmir: Palaeoecologic and palaeoenvironmental aspects. 12th International Symposium on Fossil Algae organized by BSIP under the auspices of International Fossil Algae Association (IFAA) during 16th - 24th September 2019, Lucknow, India. Abstracts.

# PhD Supervised: 1 (Ongoing)

Mr Ramanand Sagar on the topic "Mesozoic-Cenozoic coprolites from central and western India: linkages to producer(s), palaeodietary habit(s), and palaeoenvironments".

#### **COURSES TAUGHT**

# PhD candidates:

- Research Ethics
- Vertebrate and Invertebrate Palaeontology
- Cladistics
- Outreach Societal Activity

#### M.Sc./M.Tech students:

- Vertebrate and Invertebrate Palaeontology
- · Basics in Stratigraphy

#### AWARDS & RECOGNITIONS

- 2022 Honorary Associate Professor (Physical Sciences-Geology/Palaeontology) Academy of Scientific & Innovative Research (AcSIR), India.
- 2019 Honorary Assistant Professor (Physical Sciences-Geology/Palaeontology) Academy of Scientific & Innovative Research (AcSIR), India.
- 2017 Sharda Chandra Gold Medal by the Palaeontological Society of India for outstanding contributions on Indian Palaeontology.
- 2006 Senior Research Fellowship CSIR (Council of Scientific and Industrial Research, Govt. of India.
- 2006 Podium Prize for doctoral research work at Indian Institute of Technology Roorkee, Uttarakhand, India. (2006).
- 2003 Qualified joint (CSIR-UGC) National Eligibility Test (NET) for Lectureship.
- 2002 University Medal and Distinction in M.Sc. (Honours School) Geology Examination, Panjab University, India.
- 2000 University Medal in B.Sc. (Honours School) Geology Examination, Panjab University, India.
- 2000 M. N. Bose Prize in Paleontology, Panjab University, Chandigarh, India.

# PROFESSIONAL ORGANIZATIONS

- 1st January 2022 to 31st December 2024 (2 year Tenure) - Executive Council Member: The Palaeobotanical Society of India, Lucknow, INDIA
- 2019 Member: NECLIME (Neogene Climate Evolution in Eurasia)
- 2016 Life Member: The Palaeobotanical Society, Lucknow, INDIA
- 2011 Fellow Member: The Geological Society of London, UNITED KINGDOM (presently Discontinued)
- 2005 Life Member: The Palaeontological Society of India, Lucknow, INDIA

#### EDITORIAL/REVIEWING RESPONSIBILITIES

#### **EDITOR**

January 2016 to December 2018 (Full tenure) - Geophytology journal of The Palaeobotanical Society of India.

#### TRAINING PROGRAMMES ATTENDED

- 2020 "International Code of Nomenclature (ICN) Rules & Recommendations" at Birbal Sahni Institute of Palaeosciences, Lucknow, INDIA
- 2016 "Digital Imaging and Computed Tomography" at Technical Solutions Centre, General Electric (GE), Pune, Maharashtra, INDIA
- 2014 "Climate Science Training Program" at Divecha Centre for Climate Science, Indian Institute of Science (IISc) Bangalore, INDIA
- 2010 "Geological Data Management" at Keynetix Limited, Systems House, Redditch, UNITED KINGDOM
- 2010 "Stratigraphy of the Lambeth Group of London" at Geotechnical Consulting Group, London, United Kingdom
- 2005 "Analytical Methods in Studying Fossils" at Northeastern Ohio Universities College of Medicine, Rootstown, Ohio, USA

#### ADDITIONAL INFORMATION

Actively involved in the conceptualization of various projects involving <u>Geoheritage Conservation</u> in India as a Member of the Centre for Promotion of Geoheritage and Geotourism (CPGG), BSIP, Lucknow, India.

For example:

- Mandro Fossil Park including Museum 8
   Interpretation Centre, Jharkhand State, India.
- Bagh Fossil Park, Madhya Pradesh State, India.
- Restoration program on fossil woods, Khadir Island, Gujarat State, India.