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https://bsip.res.in/bsip_director.php?id=STA29

https://www.researchgate.net/profile/Veeru_Singh2

<https://scholar.google.com/citations?user=5zV40KAAAAJ&hl=en&authuser=1>



EDUCATION

2020	: Ph. D. in Geology Birbal Sahni Institute of Palaeosciences (BSIP), Lucknow and Department of Geology, Banaras Hindu University (BHU), Varanasi <i>Thesis advisor:</i> Prof. Mukund Sharma, BSIP, Lucknow Prof. Rajesh. K. Srivasatva, BHU, Varanasi <i>Thesis title:</i> Biostratigraphy of the Mesoproterozoic succession of the Chhatisgarh Supergroup, Bargarh district, Odisha, India.
2002	: Post Graduation (M.Sc) in Geology Department of Geology, University of Lucknow, Uttar Pradesh, India
2000	: Graduation (B.Sc.) in Geology , Physics and Maths University of Lucknow, Lucknow, India
1998	: Diploma in Computer Programming New Capital Computer (Regd.), Lucknow, Uttar Pradesh, India
1997	: Intermediate (Science Group) from the Uttar Pradesh Board, India
1995	: High School (Science Group) from the Uttar Pradesh Board, India

PROFESSIONAL EXPERIANCE

- 01/01/2021 to present** : **Scientist-E**, in BSIP, Lucknow, India
- 01/01/2017 to 31/12/2020** : **Scientist-D**, in BSIP, Lucknow, India
- 01/01/2013 to 31/12/2016** : **Scientist-C**, in BSIP, Lucknow, India
- 15/05/2005 to 31/12/2012** : **Scientist-B**, in BSIP, Lucknow, India
- 01/01/2004 to 14/05/2005** : **Junior Research Fellow (CSIR-UGC-NET)**
Department of Geology,
University of Lucknow, Lucknow.
- 24/12/2002 to 31/12/2003** : **Junior Research Fellow (DST Sponsored Project)**
Department of Geology,
University of Lucknow, Lucknow.

FIELD OF SPECIALISATION/EXPERTISE :

- Micropalaeontology and Stratigraphy of Precambrian Sediments of Indian Subcontinent.
- Hands on Experience on the Confocal Laser Scanning Microscope (CLSM) and Laser-Raman Spectroscopy (LRS).

CURRENT RESEARCH INTEREST :

- Micropalaeontology and Stratigraphy of Precambrian terrains (Meso-Neoproterozoic Chhattisgarh Supergroup) in Indian Subcontinent.
- Morphotaxonomy of acritarchs and other organic walled microfossils for biostratigraphy.
- Early Evolution and diversification of Proterozoic Eukaryotes.
- Understand the role of rise of oxygen in the atmosphere and diversification of eukaryotes.

HONORS AND AWARDS

2015: Best Poster, In **International Conference on Current perspectives and emerging trends in Gondwana evolution** held at BSIP, Lucknow.

2004: Awarded Junior Research Fellowship of CSIR-UGC NET.

PARTICIPATION IN SPONSORED PROJECTS :

2009-2011 : Co- Principal Investigator

Project : Palaeobiological studies from the Ganga Basin and their Biostratigraphic Correlation with the Pre-Tertiary type sections of Garhwal Himalaya.

Sponsor : Oil and Natural Gas Corporation, Dehradun, Uttarakhand, India

Project Coordinator : Dr. Naresh Chandra Mehrotra, BSIP, Lucknow, India

Principal Investigator : Dr. Rupendra Babu, BSIP, Lucknow, India

2018- 2020 : Co- Principal Investigator

Project : Mesoproterozoic microbiotas of Eurasia: an integrated approach to the Indian and Russian early eukaryotes-dominated assemblages.

Sponsor: DST RFBR (Indo -Russian)

Principal Investigator: Prof. Mukund Sharma, BSIP, Lucknow, India

Prof. Vladimir N. Sergeev, Moscow, Russia

Co- PI: Dr. S. K. Pandey, BSIP, Lucknow, India

CONTRIBUTION TO OTHER ORGANIZATIONS :

M.Sc. / B.tech Dissertations:

2015: Title: *Precambrian acritarchs: Morphology and taxonomy as a tool in Biostratigraphy.*

Candidate: Mr. Mohit Agrawal, B.Tech student
University of Petroleum and Energy Studies, Dehradun

2017: Title : *High resolution optical and spectroscopic instrumentation and their applications in life, palaeosciences and material sciences.*

Candidate : Mr. Varunjeet Singh, B. Tech student
Dr. Abdul Kalam Technical University, Luckow, Uttar Pradesh, India.

2019: Title: *Microfossils from the Meso-Neoproterozoic rocks: A case study from the Vindhyan Supergroup, India.*

Candidate: Miss. Anjali Verma, M.Sc. Student (Geology)
Department of Geology, University of Lucknow, Uttar Pradesh, India

PUBLICATIONS :

RESEARCH ARTICLE:

2020: Ansari, A. H., Sharma, M., Ahmad, S., Singh, V. K., Pandey, S. K., Kumar, Y. The glucose uptake rate of micro-organism living in hot-springs above 70°C temperature: A study of Panamik and Puga hot-springs of Ladakh region, Jammu and Kashmir, India. *Current Science*, 118 (4): 644-647.

2019: **Singh, V. K.**, Sharma, M., Sergeev. V. N. - Helically coiled cyanobacterial microfossil *Obruchevella* from the Saradih Limestone, Raipur Group, Chattisgarh Supergroup, India. *Journal of the Palaeontological Society of India*. (Accepted) (Impact Factor- 0.667)

2019: **Singh, V. K.**, Sharma, M., Sergeev, V. N. - A new record of acanthomorphic acritarch *Tappania* Yin from the early Mesoproterozoic Saraipali Formation, Singhora Group, Chhattisgarh Supergroup, India and its biostratigraphic significance. *Journal of the Geological Society of India*. (Accepted) (Impact Factor- 0.994)

2019: Sharma, M. and **Singh, V. K.** - Megascopic Carbonaceous Remains from Proterozoic Basins of India. In: M.E.A. Mondal (Editor), *Geological Evolution of the Precambrian Indian Shield*. Springer International Publishing, Cham, pp. 725-749.

2018: Tripathi, Swati, Farooqui, A., **Singh, V. K.**, Singh, S., Roy, R. K. - Morphometric analysis of Ceiba Mill. (Bombacoideae, Malvaceae) pollen: a sacred plant of the Mayan (Mesoamerican) civilization. *Palynology*.
<https://doi.org/10.1080/0191622.2018.1467350>. (Impact factor – 1.253)

2017: Firoze Quamar, M., Nawaz Ali, S., Morthekai, P. and **Singh, V. K.** - Confocal (CLSM) and light (LM) photomicrographs of different plant pollen taxa from Lucknow, India: Implications of pollen morphology for systematics, phylogeny and preservation. *Review of Palaeobotany and Palynology*, 247: 105-119. (Impact Factor – 1.674)

2016: Sharma, M., Tiwari, M., Ahmad, S., Shukla, R., Shukla, B., **Singh, V. K.**, Pandey, S. K., Ansari, A. H., Shukla, Y., Kumar, S. - Palaeobiology of Indian Proterozoic and Early Cambrian Successions — Recent Developments. *Proceedings of Indian National Science Academy*. 82, 559-579. (SCI Journal)

2016: **Singh, V. K.** & Sharma, M. - Mesoproterozoic Organic-Walled Microfossils from the Chaporadih Formation, Chandarpur Group, chattisgarh Supergroup, Odisha, India. *Journal of the Palaeontological Society of India*, 61(1): 75-84. (Impact Factor – 0.667)

2014: **Singh, V. K.** & Sharma, M. - Morphologically complexed organic-walled microfossils(OWM) from the late Palaeoproterozoic-early Mesoproterozoic Chitrakut Formation, Vindhyan Supergroup, central India and their implications on the antiquity

of eukaryotes. *Journal of the Palaeontological Society of India*, 59(1): 89-102 (Impact Factor – 0.667).

2014: Babu, R, Singh, V. K. & Mehrotra, N.C. - Neoproterozoic age based on Microbiotas from the Raipur Group of Baradwar Sub-basin, Chhattisgarh state, India. *Journal of Geological Society of India*, 84(4): 442-448. (Impact Factor - 0.994)

2014: Tripathi, S., Basumatary, S. K., **Singh, V. K.**, Bera, S. K., Nautiyal, C. M. & Thakur, B. - Palaeovegetation and climate oscillation of western Odisha, India: A pollen data-based synthesis for the Mid-Late Holocene. *Quaternary International*, 325: 83-92. (Impact Factor – 1.952)

2013: Babu, R. & **Singh, V. K.** - An evaluation of carbonaceous Metaphytes from the Proterozoic Singhora Group of Chhattisgarh Supergroup, India. *Special Publication of Geological Society of India*, 1: 325-338.

2013: **Singh, V. K.** & Babu, R. Neoproterozoic Chert Permineralized Silicified Microbiota from the Carbonate facies of Raipur Group, Chhattisgarh Basin, India: Their Biostratigraphic Significance. *Special Publication of Geological Society of India*, 1: 310-324.

2011: **Singh, V. K.**, Babu, R. & Shukla, M. - Heterolithic prokaryotes from the coated grains bearing carbonate facies of Bhander Group, Madhya Pradesh, India. *Journal of Applied Biosciences*. Vol. 37(2): 80-90.

2011: **Singh, V. K.**, Babu, R., Kumar, P. A & Shukla, M. - Discovery Of Soft Bodied Metazoans And Microphytobenthos From The Mesoproterozoic Sediments Of Vindhyan Supergroup, India. *Journal of Cell and Animal Biology*. Vol. 5(6), pp. 89-95.

2011: Babu, R. & **Singh, V. K.** - Record of aquatic carbonaceous metaphytic remains from the Proterozoic Singhora Group of Chhattisgarh Supergroup, India and their significance. *Journal of Evolutionary Biology Research*, Vol. 3(5), pp. 47-66.

2009: **Singh, V. K.**, Babu, R & Shukla, M. - Discovery of carbonaceous remains from the Neoproterozoic shales of Vindhyan Supergroup, India. *Journal of Evolutionary Biology Research*, Vol. 1: 001-017.

2009: Babu, R, **Singh, V. K.** & Shukla, M. - Cryptic bioentities with their significance from the Gotan Formation of Bilara Group, Marwar Supergroup, Rajasthan. *Current Science*, Vol. 96 (12): 1575-1577. (Impact Factor – 0.8)

2008: Mehrotra, N. C., Babu, R., Tewari, R., Jha, N., Kumar, P., **Singh V. K.** & Shukla, M. - New Global Opportunities for Hydrocarbon Exploration in Neoproterozoic Basins of Indian Subcontinent. *Journal of Geological Society of India*. Vol. 72: 543-546. (Impact Factor – 0.994)

2008: **Singh, V. K.**, Babu, R., Kumar, P and Shukla, M. - Ediacaran-Phanerozoic Fossils assemblage from the Marwar Supergroup, Western Rajasthan, India. In Proceeding of 5th *International Conference on Environmental Micropalaeontology, Microbiology and Meiobenthology*-2008, held at University of Madras, India. February 17- 25, 2008; pp. 291-294.

2006: Rai, V. & **Singh, V. K.** - Discovery of Megascopic Multicellularity in Deep Time: New Evidences From ~1.7 Ga Old Lower Vindhyan Supergroup, Uttar Pradesh, Central India. *Journal of Applied Biosciences*. Vol. 32(2): 196-203.

2004: Rai, V. & **Singh, V. K.** - Discovery of *Obruchevella* Reitlinger, 1948 from the late Palaeoproterozoic Lower Vindhyan succession and its significance. *Journal of Palaeontological Society of India*. Vol. 49. pp 189-196. (Impact Factor- 0.667)

CATALOGUE/MONOGRAPHS:

2006: Shukla, M., Babu, R., **Singh, V. K.** & Sharma M. - **A catalogue of Precambrian Palaeobiological remains from India.** Diamond Jubilee Special Publication, BSIP: 1-121.

REPORTS:

2016: **Singh, V.K.**, Saxena, A., Verma, P., Ranhotra, P.S., Agnihotri, D., Srivastava, J., Manoj, M.C., Quamar, F. - Meeting Report on India International Science Festival. *Current Science* 110, 756-757. (Impact Factor – 0.823)

2016: Ansari, A., **Singh, V. K.**, Ahmad, S. - A Report on the expedition of NASA Spaceward Bound India Program, Ladakh, India. *Journal of the Palaeontological Society of India*. (Impact Factor – 0.5)

2014: **Singh, V. K.** & Ansari, A. H. - Report On International Field Workshop On The Marwar Suergroup, Rajasthan, Western India, 20th-28th, January, 2014. *Journal of Palaeontological Society of India*, 59(1): 113-114.

PAPERS PRESENTED IN NATIONAL/INTERNATIONL CONFERENCES/SYMPOSIA:

2019: **Singh, V. K.**, Sharma, M. – Biostratigraphic implications of Organic-walled microfossils from the Neoproterozoic Saradih Limestone of the Raipur Group, Chhattisgarh Supergroup, Central India. In *XXVII Indian Colloquium on Micropaleontology and Stratigraphy (ICMS-2019)*, at: Banaras Hindu University, Varanasi, India, November, 2019. (Abstract no. 17).

2019: **Singh, V. K., Sharma, M.** – Eukaryotic fossils from the Mesoproterozoic-Neoproterozoic Chhattisgarh Supergroup, Central India. In *XXVII Indian Colloquium on Micropaleontology and Stratigraphy (ICMS-2019)*, at Banaras Hindu University, Varanasi, India, November, 2019 (Abstract no. 18).

2019: Ahmad, S., Sharma, M., Ansari, A.H., **Singh, V.K.**, Pandey, S.K., Agrawal, S. Evidence of the Oxygenation pulse recorded from the Buxa Formation (Sikkim), Lesser Himalaya, India. In *XXVII Indian Colloquium on Micropaleontology and Stratigraphy (ICMS-2019)*, at: Banaras Hindu University, Varanasi, India, November, 2019 (Abstract no. 21).

2019: **Singh, V. K** and Sharma, M. - Occurrence of a carbonaceous fossil belonging to Phaeophyceae from the ~1500 - Million -Years - old Saraipali Formation, Chhattisgarh Supergroup, Peninsular India in 12th International Symposium on Fossil Algae, Lucknow. Abstract no. 06.

2019: **Singh, V. K.**, Sharma, M., Ansari, A. H. and Agarwal, S. C and O isotope studies of the Pre-Cryogenian (Tonian) carbonate successions of the Raipur Group, the Chhattisgarh Supergroup, Central India. In 35th Convention on Indian Association of Sedimentologists, held at Sagar (M.P.), India. Abstract No. 20.

2018: Tripathi Swati, Farooqui A, **Singh V. K.**, Singh S, Roy RK – Comparative morphological analysis of Ceiba Mill. (Bombacoideae, Malvaceae) pollen through FESEM, CLSM and LM: A sacred plant of Mayan (Mesoamerican civilization). 10th European Palaeobotany & Palynology Conf., University College Dublin, Dublin, Ireland.

2016: **Singh, V.K** and Sharma, M. - Confocal Laser Scanning Microscopy (CLSM) based investigation on Cyanobacterial microfossil Oscillatoriopsis in National Conference ad Field Workshop on Precambrian of India. Abstract No. 115

2016: Sharma, M. and **Singh, V.K.** - Megascopic carbonaceous remains from Proterozoic basins of India: Lessons in Evolutionary biology" in National Conference and Field Workshop on Precambrian of India, Jhansi. Abstract No. 107

2016: Sharma, M., **Singh, V.K.** and Shukla, Y. - Origin and Diversification of Precambrian Eukaryotes: Evidence from Proterozoic successions of India. In 35th International Geological Congress, South Africa.

2016: Sharma, M. and **Singh, V. K.** - Micropalaeontological assemblage of the Proterozoic Chhattisgarh Supergroup, Central India and its biostratigraphical implications" in International conference on Geoscience and Environment & 32nd Annual convention of Indian Association of Sedimentologists, Tamil Nadu. Abstract No. 121

2015: **Singh, V. K.** and Sharma, M. - Tappania bearing Organic-Walled microfossils association in Proterozoic Chhattisgarh Supergroup, Central India. In XXV Indian Colloquium on Micropalaeontology and Stratigraphy, Aurangabad,. Abstract No. 77

2015: Sharma, M., Aggarwal, N., **Singh, V. K.**, Garg, R., Kumar, M., Rai, J., Prasad, V., Singh, A., Dev, S. S. and Saikia, P. J. - Palynological and Biostratigraphical investigations of the well Punam-I, Bikaner - Nagaur Basin, Western Rajasthan with remarks on Upper Carbonate succession. In International Conference on Current perspective and emerging issues in Gondwana evolution. Abstract No. 98.

2013: **Singh, V.K.** & Sharma, M.- Antiquity, affinity and significance of morphologically complex Organic-Walled Microfossils from the Early Mesoproterozoic Chitrakut Formation, Vindhyan Supergroup, Central India. In XXIV Indian Colloquium on Micropalaeontology and Stratigraphy, Dehradun,. Abstract No. 177.

2013: Tripathi S, Basumatary, S.K., **Singh, V.K.**, Bera, S.K., Nautiyal, C.M. & Thakur, B. - Signals of hypsithermal and Little Ice age from western Odisha, India: a palaeoecological interpretation since Mid-Late Holocene. In National Conference on Recent Developments in Plants and Earth Science, 139.

2013: Thakur, B., Singh, V.K., Tripathi S, Basumatary, S.K., Bera, S.K., & Nautiyal, C.M. - Diatom-based study of flood plain sediments from western Odisha, India to decipher monsoonal fluctuations since Mid- Holocene. In National Conference on Recent Developments in Plants and Earth Science, 136.

2012: **Singh, V. K.** and Babu, R. - Shale facies microfossils from the Proterozoic Chhattisgarh Supergroup, India. In 56th Annual Meeting of Palaeontological Association held at University College Dublin, Dublin. Pp. 87.

2011: **Singh, V. K.** and Babu, R. - Permineralized microbiota from the carbonate facies of Raipur Group, Chhattisgarh Supergroup: Its Biostratigraphic Implications. In XXIII Indian Colloquium on Micropalaeontology and Stratigraphy and International Symposium on global bioevents in the earth history. Bangalore, pp. 174

2011: Babu, R. and **Singh, V. K.** - Megascopic multicellularity in deep time: New evidences from the Proterozoic Singhora Group. In XXIII Indian Colloquium on Micropalaeontology and Stratigraphy and International Symposium on global bioevents in the earth history. Bangalore, pp. 111-112.

2011: Mehrotra, N. C., Verma, N. K, Maithy, P. K., Kumar, G. & **Singh, V. K.** - Noteworthy Occurrences of biological remains from the Pre-tertiary succession of Ganga Basin and their relevance to biostratigraphy. In the 2nd South Asian Geoscience Conference and Exhibition. GEOIndia, 2011.

2011: Mehrotra, N. C., Verma, N. K, Maithy, P. K., Kumar, G. & **Singh, V. K.** - Microbiota from the Maldevta section of Blaini Formation, Krol Belt, Lesser Himalaya. In the 2nd South Asian Geoscience Conference and Exhibition. GEOIndia, 2011.

2011: Bera, S. K., Basumatary, S. K., Brahma, M, **Singh, V. K.** & Arya, A. K. - Interplay Between Pollen and Vegetation in and around Dhir Beel, Dhubri District, Assam: A Future Potential Ramsar Site. National Seminar on Late Quaternary Geology of the Himalayan Orogen and the Foreland Basin, February, 16-17, 2011, Lucknow, 63.

2009: **Singh, V. K.** & Babu, R. - Studies on the Palaeobiological evidences from the Lower Vindhyan deposits of Chitrakut Region, Banda District, Uttar Pradesh. In *XXII Indian Colloquium on Micropalaeontology and Stratigraphy*, Tamilnadu, 16-18 December: 129-130.

2009: **Singh, V. K.** & Babu, R. - Neoproterozoic microfossils recovery from the Bhandar Group, Vindhyan Supergroup, central India: their stratigraphic significance. *XXVI Convention Indian Asso. Sedimentologists*, Visakhapatnam, 16-18 December: 58.

2009: Babu, R. & **Singh, V. K.** - Palaeobiological investigations from the Singhora Group, Chhattisgarh Supergroup, Chhattisgarh and their significance. National Seminar on Deltas and other sedimentary Basins: their resources potential. *XXVI Convention Indian Asso. Sedimentologists*, Visakhapatnam: 71.

2009: Babu, R. & **Singh, V. K.** - Signatures of multicellular metaphytes in Saraipali Formation of Singhora Group exposed in Mahasamund District, Chhattisgarh. In *XXII Indian Colloquium on Micropalaeontology and Stratigraphy*, Tamilnadu, 16-18 December: 92.

2008: **Singh, V. K.**, Babu, R. & Shukla, M. - Meso-Neoproterozoic microbiotic fossil assemblage from the Chitrakut Formation, Semri Group, Vindhyan Supergroup. In National Conference on *Plant Life Through The Ages*, Lucknow. November, 2008: 170-171.

2008: Babu, R. & **Singh, V. K.** - Microbiotic fossil assemblage from the Chhuipali Formation of Singhora Group, Chhattisgarh Supergroup. In National Conference on *Plant Life Through The Ages*, Lucknow, November, 2008: 8

2007: **Singh, V. K.**, Shukla M. and Babu. R. - Occurrences of silicified microfossils from the Neoproterozoic Bhandar Group, Vindhyan Supergroup, Satna district, Madhya Pradesh. In *XXI India Colloquium on Micropalaeontology and Stratigraphy*, Lucknow November, 16-17, 2007, pp. 207-208

2007: Babu, R., **Singh, V. K.** and Shukla, M. - Ediacaran Micro-phytobenthos from the Bilara Group, Marwar Supergroup, Rajasthan. In *XXI India Colloquium on Micropalaeontology and Stratigraphy*, Lucknow, November, 16-17, 2007, pp. 5-6

2006: Rai, V. and **Singh, V. K.** - Discovery of Carbonaceous Megafossils from Palaeoproterozoic (~1.63 Ga) Olive Shale Formation, Lower Vindhyan Succession, Uttar Pradesh, Central India: Exceptional Evidences of megascopic multicellularity in Deep time. In National Seminar on *Precambrian life: Indian scenario*, Durgapur; August 23- 24, 2006, pp. 17-19.

2006: **Singh, V. K.**, Shukla, M. and Rai, V. - New Evidences of Carbonaceous Metaphyte fossils from the Maihar-Nagod area (M. P.), Bhandar Group, Vindhyan Supergroup, India In Diamond Jubilee International Conference on "Changing Scenario in Palaeobotany and Allied Subjects" Lucknow during 15-17 November, 2006, pp. 147-148.

PARTICIPATION IN CONFERENCES/TRAINING PROGRAMMES:

2002: **International Field Workshop on the Vindhyan Basin, Central India**, organized by Palaeontological Society of India, Lucknow, U.P., India.

2003: Training undertaken in **Remote Sensing and GIS Applications for Management of Natural Disasters** under the aegis of U.P. State Natural Resources Management

System (UPSNRMS organised in Remote Sensing Application Centre, Uttar Pradesh. (Council of Science and Technology, Govt. of U.P.).

- 2003: **XIX Indian Colloquium on Micropalaeontology and Stratigraphy & Symposium on recent developments in Indian ocean palaeoceanography and palaeoclimate**" Varanasi, U.P., India.
- 2005: Department of Science & Technology sponsored SERC Winter School on **Geological Mapping of the Sedimentary Terrain in Cuddapah Basin, Kurnool area, Andhra Pradesh**, conducted by Geological Survey of India Training Institute, Hyderabad.
- 2006: Diamond Jubilee International Conference on "**Changing Scenario in Palaeobotany and Allied Subjects**" Organized by BSIP, Lucknow.
- 2007: Ministry of Environment and Forest, New Delhi sponsored **Workshop on Algae** held in Department of Botany, University of Lucknow, Lucknow.
- 2007: **XXI India Colloquium on Micropalaeontology and Stratigraphy**, held at BSIP, Lucknow .
- 2007: Symposium on **Palynology in Fossil fuel exploration** held in BSIP, Lucknow.
- 2008: National Conference on **Plant Life through the Ages**, held at BSIP, Lucknow.
- 2008: Delivered a Lecture on topic entitled as "**Evolutionary explosion in deep time: a peep into the Proterozoic sedimentary basins of India**" at BSIP, Lucknow.
- 2009: **XXII Indian Colloquium on Micropalaeontology and Stratigraphy**, PG & Research Department of Geology, National College, Tiruchirapalli, Tamilnadu.
- 2009: Oriented Course on **Sedimentology and Sequence Stratigraphy** held at Birbal Sahni Institute of Palaeobotany, Lucknow.
- 2011: **XXIII Indian Colloquium on Micropalaeontology and Stratigraphy and International Symposium on Global Bioevents in the Earth History** held at Bangalore University, Bangalore.
- 2012: 56th Annual Meeting of Palaeontological Association and Symposium on **Taphonomy and fidelity of the fossil record**, held at University College Dublin, Dublin.
- 2013: **Coursework on Palaeosols** conducted by Prof. Gregory John Retallack at BSIP, Lucknow.
- 2013: **XXIV Indian Colloquium on Micropalaeontology and Stratigraphy** held at WIHG, Dehradun.
- 2013: National Conference on **Recent Developments in Plants and Earth Science** held at Birbal Sahni Institute of Palaeobotany, Lucknow.
- 2014: Attended workshop and Training Programme on **Acritarchs: Morphological aspects & significance in Palaeobiological studies** conducted by Prof. Shuhai Xiao held at BSIP, Lucknow.
- 2014: Attended **International field workshop on the Marwar Supergroup, Rajasthan, India**, jointly organized by the Society of Earth Scientists (SES) and Birbal Sahni Institute of Palaeobotany (BSIP), Lucknow.
- 2015: **International Conference on Current perspectives and emerging trends in Gondwana evolution**, BSIP, Lucknow during February 19 – 20, 2015.
- 2015: **India International Science Festival**, held at New Delhi.
- 2015: INSIDE RAMAN organized by RENISHAW at IISER, Mohali.

2016: **103rd Indian Science Congress -2016**, held at Mysore.

2016: **32nd Annual Convention of Indian Association of Sedimentologists and one day workshop on Oil & Gas Exploration** held at Tamilnadu.

2016: **NASA Spaceward Bound India – 2016** organized by BSIP, MSA and NASA held at Ladakh, India.

2016: **National Conference ad Field Workshop on Precanbrian of India** held at Jhansi, India.

2016: **2nd India Internation Science Festival** held at New Delhi.

2017: **International Conference on Emergence and Evolution of Biological Complexity, held** at National Centre for Biological Sciences, Bangalore.

2018: **4th India Internation Science Festival** held at Lucknow, Uttar Pradesh.

2019: **Astrobiology in India: Roadmap A head held** at Birbal Sahni Institute of Palaeosciences, Lucknow.

2019: **12th International Symposium on Fossil Algae** at Birbal Sahni Institute of Palaeosciences, Lucknow, India.

2019: **27th Indian Colloquium on Micropaleontology and Stratigraphy** at Banaras Hindu University, Varanasi, Uttar Pradesh, India.

2020: e – Training on **Fundamentals of Sedimentology and Mapping in sedimentary Terrain** organized by FTC-Kujum GSITI, Jharkhand, India.

VISITS IN INDIA AND ABROAD:

1. University College Dublin, Dublin, Ireland in December 2012.
2. Visited Oil and Natural Gas Corporation, Dehradun, Uttarakhand in year 2009- 2010 for field work and collection of rock sample for the ONGC Sponsored project (Three times).
3. Visited in different parts of Chhattisgarh state for project related field excursion under XIIth five year research project since 2012- 2017 (Four times)
4. Visited different parts of Madhya Pradesh state for the field excursion in year 2006 under Xth Five year research project.

MEMBERSHIPS IN SOCIETIES:

1. Life Fellow of Palaeontological Society of India, Lucknow since 2005.
2. Life fellow of Lucknow University Geology Department Alumni Association since 2006.
3. Life fellow of Society of Earth Sciences since 2008.
4. Life Fellow of the Palaeobotanical Society, BSIP, Lucknow Since 2013.
5. Life Fellow of Geological Society of India since 2020.