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Honorary Assistant Professor
Physical Sciences, **AcSIR**
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RESEARCH INTEREST

My research work investigates the emergence of macroscopic multicellular complex eukaryotic life of the Cryogenian, Ediacaran, and Cambrian Period. Studies incorporate to understand the affinity, phylogeny, ichnology, taphonomic bias of life forms representing the very first metazoans and metaphytes, encompasses earliest complex biosphere and their respective sedimentary depositional environment. Presently, I am working on a unique Ediacaran-Cambrian succession of peninsular India i.e., the Ediacaran-Cambrian aged Marwar Supergroup and promising Cryogenian-Ediacaran succession of the Bhander Group, Vindhyan Supergroup, India along with classical Ediacaran Lantian biota of South China.

DOCTORAL

During Ph.D. tenure, I dealt with the Ediacaran complex life forms, Microbially Induced Sedimentary Structure (MISS) and their role in earliest complex biosphere their relevance in context of the Indian peninsular platforms. Detailed aspects of the palaeobiology, palaeobiogeographic reconstruction, palaeofacies and its environment of deposition have been covered. Based on all, inter and intra basinal correlations have been established between the Vindhyan and Marwar Supergroup.

POST – DOCTORAL

During postdoctoral tenure, I was dealing with Ediacaran and Cambrian life forms; its evolutionary trends, role of microbial communities during deposition and preservation, affinity, taphonomic constraints and, of course debatable view of trace or body fossils of the Ediacaran life forms. Apart from this, I specifically dealt with the Cambrian trace fossils, its behavioral pattern and palaeoecological consideration of the Nagaur Sandstone, Marwar Supergroup, India.

ACADEMIC POSITIONS

January 2022-Present	**SCIENTIST 'D'** Birbal Sahni Institute of Palaeosciences, Lucknow, India.
January 2018–Dec 2021	**SCIENTIST 'C'** Birbal Sahni Institute of Palaeosciences, Lucknow, India.
October 2013–Dec 2017	**SCIENTIST 'B'** Birbal Sahni Institute of Palaeosciences, Lucknow, India.
May 27–Nov 25 2016 (On deputation)	**Visiting Scientist** under Chinese Academy of Sciences **President's International Fellowship Initiative (CAS-PIFI)** in Nanjing Institute of Geology and Palaeontology (NIGPAS), Nanjing, P.R. China.
June 2011–Oct 2013	**Birbal Sahni Research Associate (BSRA)** at Birbal Sahni Institute of Palaeosciences, Lucknow, India. (June 2011 – October 2013)
Oct 2008-Feb 2011	**Senior Research Fellow (SRF)** (Council of Scientific and Industrial Research (CSIR), New Delhi) at Centre of Advanced Study in Geology, University of Lucknow, India.
Jan 2006-Sep 2008	**Junior Research Fellow (JRF)** (Department of Science and Technology, New Delhi) at Centre of Advanced Study in Geology, University of Lucknow, India.

EDUCATION

2011	**Ph.D.** (Geology) from University of Lucknow, INDIA
2004	**M.Sc.** (Geology) from University of Lucknow, INDIA
2002	**B.Sc.** (Geology, Zoology and Botany) from University of Lucknow, INDIA
1998	**Intermediate** from U.P. Board, INDIA
1996	**High School** from U.P. Board, INDIA

AWARDS & HOUNORS

2019 Onwards	**Honorary Assistant Professor** (Physical Sciences: Geology/Palaeontology): Academy of Scientific & Innovative Research (AcSIR), India.
March 6, 2019	The **Mani Shankar Shukla Memorial Gold Medal** has been awarded for outstanding contributions in the field of Micropalaeontology for the year of 2018.
May 27–Nov 25, 2016	**Visiting Professor** under Chinese Academy of Sciences Presidents' International Fellowship Initiative **(CAS-PIFI)** in Nanjing Institute of Geology and Palaeontology, 39 East Beijing Road, Jiangsu Province, China.
June 2011–Oct 2013	**Birbal Sahni Research Associate (BSRA)** at Birbal Sahni Institute of Palaeosciences, Lucknow, India
Oct 2008–Feb 2011	**Senior Research Fellow (SRF)** (Council of Scientific and Industrial Research (CSIR), New Delhi) at Centre of Advanced Study in Geology, University of Lucknow, India.
Jan 2006–Sep 2008	**Junior Research Fellow (JRF)** (Department of Science and Technology, New Delhi) at Centre of Advanced Study in Geology, University of Lucknow, India.

NATIONAL/INTERNATIONAL PROJECT

1. Co-PI, Indo-Russian Project (**DST-IFBR-2018**): Mesoproterozoic microbiotas of Eurasia: an integrated approach to the Indian and Russian early eukaryote-dominated assemblages**. (Completed)**
2. Co-PI, **BSIP-KDMIPE-ONGC Project**: Correlation of the Vindhyan in Son and Chambal Valley by using High-resolution Biostratigraphy, Chemostratigraphy, Palaeoredox reconstruction, Palaeoenvironment and Palaeogeography **(Ongoing)**

PUBLICATIONS

ARTICLE/RESEARCH COMMUNICATIONS

1. S. Kumar, **S.K. Pandey** (2007). Microbial mat induced sedimentary structures in the Neoproterozoic Bundi Hill Sandstone, Indargarh area, Rajasthan. ***Current Science*** 93(7), 1009 - 1012.
2. S. Kumar, **S.K. Pandey** (2008a). Discovery of Organic walled microbiota from the black-bedded chert, Balwan Limestone, Bhander Group, Lakheri area, Rajasthan. ***Current Science*** 94 (6), 797-800.
3. S. Kumar and **S.K. Pandey** (2008b). Discovery of trilobite trace fossils from the Nagaur Sandstone, the Marwar Supergroup, Dulmera area, District Bikaner, Rajasthan. ***Current Science*** 94 (8), 1081-1085.
4. S. Kumar, **S.K. Pandey** (2008c). *Arumberia* and associated fossils from the Neoproterozoic Maihar Sandstone, Vindhyan Supergroup, Central India. ***Journal of the Palaeontological Society of India*** 53 (1), 83 – 97.
5. S. Kumar, P. K. Misra, **S.K. Pandey** (2009a). Discovery of giant Ediacaran plant fossils with Vaucheriacean affinity from the Jodhpur Sandstone, Marwar Supergroup, Jodhpur area, Western Rajasthan. ***Current Science*** 97 (5), 701 – 705.

6. S. Kumar, **S.K. Pandey** (2009b). A note on the occurrence of *Arumberia banksi* from the Jodhpur Sandstone, Marwar Supergroup, Jodhpur area, Rajasthan. ***Journal of the Palaeontological Society of India*** 54 (2), 171-178.
7. S. Kumar, **S.K. Pandey** (2010). Trace fossils from the Nagaur Sandstone, Marwar Supergroup, Dulmera area, Bikaner district, Rajasthan. ***Journal of Asian Earth Sciences*** 38, 77-85.
8. S. Kumar, **S.K. Pandey,** Shamim Ahmad (2011). Occurrence of giant nodules in the Jodhpur Sandstone, Sursagar area, Jodhpur, Rajasthan. ***Current Science*** 100(9), 1294 – 1296.
9. Mukund Sharma, **S.K. Pandey**, 2012. Stromatolites of the Kaladgi Basin, Karnataka, India: their systematics, biostratigraphy and age implications. ***Palaeobotanist*** 61, 103 – 121.
10. Mukund Sharma, S. Kumar, Meera Tiwari, Yogmaya Shukla, **S.K. Pandey,** Santanu Banerjee, Purnima Srivastava (2012). Palaeobiological Constraints and the Precambrian Biosphere: Indian Evidence. ***Proceedings of the Indian National Science Academy*** 78(3), 407 – 422
11. **S.K. Pandey***, S. Kumar (2013). Organic walled microbiota from the silicified algal clasts, Bhander Limestone, Satna area, Madhya Pradesh. ***Journal of the Geological Society of India*** 82, 499-508.
12. Mukund Sharma, Meera Tiwari, Shamim Ahmad, Rajita Gautam, Bandana Shukla, V.K. Singh, **S.K. Pandey**, A.H. Ansari, Yogmaya Shukla (2016). Palaeobiology of Indian Proterozoic and Early Cambrian successions-recent developments. ***Proceedings of the Indian National Science Academy*** 82-3, 5559-579.
13. **S.K. Pandey** and Mukund Sharma 2017. Enigmatic Ediacaran Megascopic bedding plane structures on the Sonia Sandstone, the Jodhpur Group, Marwar Supergroup, India: Seaweed or problematica? ***Geological Journal*** 52, 784–807.
14. Gregory J. Retallack, Sunil Bajpai, Xiuming Liu, Vivesh Vir Kapur, and **S.K. Pandey** (2018a). Advent of Strong South Asian Monsoon by 20 Million Years Ago. ***Journal of Geology*** 126-1, 1 – 24.
15. A.H. Ansari, **S.K. Pandey**, Mukund Sharma, Shailesh Agrawal, Yogesh Kumar (2018b). Carbon and oxygen isotope stratigraphy of the Ediacaran Bilara Group, Marwar Supergroup, India: Evidence for high amplitude carbon isotopic negative excursions. ***Precambrian Research*** 308, 75-91.
16. Mukund Sharma, **S.K. Pandey***, S. Ahmad, K. Kumar, A. H. Ansari (2018c). Observations on the ichnospecies *Monomorphichnus multilineatus* from the Nagaur Sandstone (Cambrian Series 2-Stage 4), Marwar Supergroup, India. ***Journal of Earth System Sciences*** 127, Article 75.
17. Mukund Sharma, S. Ahmad, **S.K. Pandey**, and Kuldeep Kumar (2018d). On the ichnofossil *Treptichnus pedum*: inferences from the Nagaur Sandstone, Marwar Supergroup, India. ***Bulletin of Geosciences*** 93-3, 305-325.
18. A.H. Ansari, I.B. Singh, S.K. Bhattacharya, Yogesh Kumar, **S.K. Pandey**, S. Kumar, Shamim Ahmad (2019a). Note on the C and O stratigraphy of the Garbyang Formation (Malla Johar area), Tethyan Himalaya, India. ***Journal of the Palaeontological Society of India*** 64(2), 265-274.
19. **S.K. Pandey*,** N. Bykova, M. Sharma, G.A. Karlova, A.H. Ansari, Y. Kumar, S. Ahmad, M.K. Pandit, (2019b). Current status of the Ediacaran-Cambrian Bilara Group, Marwar Supergroup, India. In: Short summaries presented at the International Congress on Ediacaric and Ediacaric-Cambrian transit (Guadalupe, Extremadura, Spain, October 17-24, 2019) (Eds: Álvaro, J.J., Jensen, S.), ***Estudios Geologicos***, 75(2), p002, 29-30.
20. Shamim Ahmad, Ayushi Srivastava, Mukund Sharma, **S.K. Pandey**, A.H. Ansari, Purnima Srivastava (2019c). Diversification, behavioural traits and palaeoecology of burrows: A case study from the Cambrian Nagaur Sandstone, Marwar Supergroup, Rajasthan. In: Short summaries presented at the International Congress on Ediacaric and Ediacaric-Cambrian transit (Guadalupe, Extremadura, Spain, October 17-24, 2019) (Eds: Álvaro, J.J., Jensen, S.), ***Estudios Geologicos*** 75(2), p002, 01-02.
21. A.H. Ansari, Mukund Sharma, S. Ahmad, Veeru Kant Singh, **S.K. Pandey**, Yogesh Kumar (2020a). Carbon uptake rate of hotspring biota above 70°C: A study of Panamik and Puga hotspringsof Ladakh region, Jammu and Kashmir, India. ***Current Science*** 118(4), 644-648.

22. A.H. Ansari, **S.K. Pandey**, Kamlesh Kumar, Shailesh Agrawal, Shamim Ahmad, Mayank Shekhar (2020b). Palaeoredox link with the late Neoproterozoic-early Cambrian Bilara Carbonate deposition, Marwar Supergroup, India. ***Carbonate and Evaporites*** 35(2), Article 38.

23. Bin Wan, Zhe Chen, Xunlai Yuan, Ke Pang, Qing Tang, Chengguo Guan, Xiaopeng Wang, **S.K. Pandey,** Mary L. Droser, Shuhai Xiao (2020c). Taxonomy, Taphonomy and Palaeoecology of Ediacaran Fossil *Flabellophyton* from the Lantian and Ediacara biotas. ***Gondwana Research*** 84, 296–314.

24. Zhongwu Lan, Shujing Zhang, Xian-Hua Li, **S.K. Pandey**, Mukund Sharma, Yogmaya Shukla, Shamim Ahmad, Subir Sarkar, Mingguo Zhai (2020d). Towards resolving the 'jigsaw puzzle' and age-fossil inconsistency within East Gondwana. ***Precambrian research*** 345, 105775.

25. Zhongwu Lan, Shujing Zhang, Xian-Hua Li, **S.K. Pandey**, Mukund Sharma, Yogmaya Shukla, Shamim Ahmad, Subir Sarkar, Mingguo Zhai (2021a). A Reply: Towards resolving the 'jigsaw puzzle' and age-fossil inconsistency within East Gondwana. ***Precambrian research*** 352, 105900.

26. A.H. Ansari, **S.K. Pandey** (2021b). Authigenic δ^{13}C-carb negative excursion in the late Ediacaran–early Cambrian Bilara Group, Marwar Supergroup, India. ***Journal of the Geological Society of India*** 97, 615 – 624.

27. Zhongwu Lan, **S.K. Pandey**, Shujing Zhang, Mukund Sharma, Yuya Gao, Shitou Wu (2021c). Precambrian crustal evolution in Northern Indian Block: Evidence from detrital zircon U-Pb ages and Hf-isotopes. ***Precambrian research*** 361, 106238.

28. Mukund Sharma, Veeru Kant Singh, **S.K. Pandey**, AH Ansari, Yogmaya Shukla, Shamim Ahmad, Yogesh Kumar, Divya Singh (2021d). Precambrian and early Cambrian palaeobiology of India: *Quo vadis.* ***Proceedings of the Indian National Science Academy*** 87, 199–233.

29. Md. Firoze Quamar, Biswajeet Thakur, Veeru Kant Singh, and **S.K. Pandey** (2021e). Pollen heteromorphism in *Schleichera* Lour. (Sapindaceae), observed in surface soil samples from central India. ***Acta Palaeobotanica*** 61(1), 32–41.

30. Uday Bhan, Divya Singh, Mukund Sharma, Deepak Singh, **S.K. Pandey** (2021f). A note on the Fan-Fabric Structures in the late Palaeoproterozoic Kajrahat Limestone, Katni, M.P., India. ***Journal of the Palaeontological Society of India*** 66(2), 315 – 322.

31. Shamim Ahmad, **S.K. Pandey**, Mukund Sharma, Ayushi Srivastava (2021g). The early Cambrian (Series 2, Stage 3) burrows from the Nagaur Sandstone, Marwar Supergroup, Rajasthan, India: palaeoenvironmental and palaeoecological considerations. ***Journal of the Palaeontological Society of India*** 66(2), 271 – 289.

32. Divya Singh, Mukund Sharma, Uday Bhan, Bindhyachal Pandey, **S.K. Pandey**, Deepak Singh (2021h). Carbonate Fan Fabric Structures (FFS) in time and space: A case study from the Palaeoproterozoic Kajrahat Limestone, Vindhyan Supergroup, India. ***Journal of the Palaeontological Society of India*** 66(2), 290 – 302.

33. **S.K. Pandey***, Shamim Ahmad, Mukund Sharma (2023a). *Dickinsonia tenuis* reported by Retallack et al. 2021 is not a fossil, instead an impression of an extant '*fallen beehive*'. ***Journal of the Geological Society of India*** 99, 311-316.

34. **SK Pandey*,** Deepak Singh, Mukund Sharma, Shamim Ahmad, Uday Bhan (2023b). A new palaeobiological assemblage from the Son Valley Bhander Group and its implications on the age of the upper Vindhyans of India. ***Palaeoworld*** *https://doi.org/10.1016/j.palwor.2023.06.001*

35. **S.K. Pandey***, Shamim Ahmad and Mukund Sharma (2023c). Discussion: *Dickinsonia tenuis* reported by Retallack et al. 2021 is not a Fossil, Instead an Impression of an Extant 'fallen beehive' by S.K. Pandey, Shamim Ahmad and Mukund Sharma (2023c). Jour. Geol. Soc. India, v.99, 2023, pp. 1033-1036. ***Journal of the Geological Society of India*** 99, 9-12.

36. A.H. Ansari, **S.K. Pandey***, Shamim Ahmad, Mukund Sharma, Pawan Govil, Amritpal Singh Chaddha, Anupam Sharma (2023d). High primary productivity in an Ediacaran shallow marine basin influenced by strong seasonal to perennial upwelling. ***Geological Magazine*** https://doi.org/10.1017/S0016756823000614

PREPRINT

1. **S.K. Pandey***, Shamim Ahmad, Mukund Sharma (2023). *Dickinsonia tenuis* reported by Retallack et al. 2021 is not a fossil, instead an impression of an extant '*fallen beehive*'. ESS open archive, DOI: 10.22541/essoar.167397423.32091965/v1

BOOK

1. **S.K. Pandey*,** 2012. Biozonation and Correlation of the Neoproterozoic Bhander Group, India. ***LAP LAMBERT Academic Publishing, Germany,*** 165 p.

PROCEEDING VOLUME/CHAPTER

1 **S.K. Pandey***, 2014. Thrombolite from the Neoproterozoic Bhander Group, Vindhyan Supergroup, central India. ***Proceedings of the 1st International Congress on Stratigraphy.*** Rocha, R., Pais, J., Finney, S., Kullberg, J.C. (Eds.) XXVII, 1143-1147. (***Series: Springer Geology***)

FIELD GUIDE-BOOK

1. Mukund Sharma, **S.K. Pandey** and S. Kumar, 2014. Marwar Supergroup, Rajasthan. ***The Society of Earth Scientists, Lucknow***. P. 80.
2. Mukund Sharma, **S.K. Pandey** and S. Kumar, 2020. Vindhyan Supergroup, India. ***36th IGC 2020***.
3. NK Chauhan, **SK Pandey**, AK Singh, A Shrivastava 2023. National Geo-heritage field workshop on Zawar ancient metallurgical national geological monument Jhamarkotra stromatolite (fossil algae) National Geological Monument. ***The Society of Earth Scientists, Lucknow***. P. 13.

MEETING REPORT

1. **S.K. Pandey** and Bandana Dimri (2014). Field Workshop on the Marwar Supergroup*. ***Current Science***, 107(2), 169 – 170.
2. Vivesh V. Kapur, **S.K. Pandey** and S.R. Mishra (2015**).** Palaeogene of the Indian subcontinent. ***Current Science***, 109(5), 848 – 849.

ABSTRACT

1. **S.K. Pandey,** S. Kumar **2007**. Micro and Ministromatolites from the Neoproterozoic Bhander Limestone (Upper Vindhyans), Central India. **XXI Indian Colloquium on Micropalaeontology and Stratigraphy,** BSIP, Lucknow: 125.
2. **S.K. Pandey,** S. Kumar **2007**. Occurrence of *Arumberia* in the Maihar Sandstone (Bhander Group) Central India: Implication for the Upper age limit of the Vindhyan Supergorup. **International Conference on Precambrian Sedimentation and Tectonics and second GPSS Meeting**. IIT, Bombay: 20.
3. Yogendra Bhadauriya, Pankaj Sharma, S. Nawaz Ali, **S.K. Pandey 2011.** Morphometric analysis of the Nandakini River Basin, Garhwal Himalaya. **National Seminar on Late Quaternary Geology of the Himalayan Orogen and the Foreland Basin,** February 16-17, 2011, CAS in Geology, University of Lucknow: 63.
4. Mukund Sharma, **S.K. Pandey 2011.** Fossil lagerstättens and an age assessment of the Nagaur Sandstone, Marwar Supergroup. **XXIII Indian Colloquium on "Micropalaeontology and Stratigraphy (ICMS) and International Symposium on Global Bioevents in the Earth History",** Bangalore University, India. XXIII ICMS-64, 82.
5. Mukund Sharma, **S.K. Pandey 2011.** Ichno-fossils and microfossils from the Precambrian-Cambrian Marwar Supergroup, India. **World Conference on Paleontology and Stratigraphy**, Nakhon Ratchasima 30000, THAILAND. 73.
6. **S.K. Pandey**, S. Kumar 2011. Biozonation and correlation of the Neoproterozoic Bhander Group, central India. **World Conference on Paleontology and Stratigraphy, Nakhon Ratchasima 30000, THAILAND. 193.**

7. **S.K. Pandey** 2012. Enigmatic life in the Marwar Supergroup, western Rajasthan, India. **56th Annual Meeting of the Palaeontological Association, University College Dublin, Ireland.**
8. Deepak Singh, Anurodh Dayal, Mukund Sharma, Uday Bhan, Pradeep Joshi, **S.K. Pandey 2012.** Organic Matter Maturation studies of the Bhander Group, Maihar area, Satna District, Madhya Pradesh. **International Workshop on Exploration & Exploitation of Shale Gas**, CSIR-National Geophysical Research Institute, Uppal Road, Hyderabad, India.
9. Uday Bhan, Anurodh Dayal, Mukund Sharma, Deepak Singh, Pradeep Joshi, **S.K. Pandey 2012.** Hydrocarbon Characterization of Carbonates and Shales of the Semri Group, Maihar area, Lower Vindhyan, Satna District, Madhya Pradesh. **International Workshop on Exploration & Exploitation of Shale Gas**, CSIR-National Geophysical Research Institute, Hyderabad, India.
10. **S.K. Pandey**, Mukund sharma, 2013. Enigmatic megascopic bedding plane structures on the Ediacaran Sonia Sandstone of the Jodhpur Group, Marwar Supergroup, Rajasthan. 87. XXIV **Indian Colloquium on Micropaleontology and Stratigraphy** at Wadia Institute of Himalayan Geology, Dehradun (November 18th – 20th, 2013).
11. Mukund Sharma, Uday Bhan, **S.K. Pandey**, Deepak Singh, Pradeep Joshi, 2013. Mesoproterozoic silicified microfossils from the Salkhan Limestone of the Semri Group, Maihar area, M.P. 134. XXIV **Indian Colloquium on Micropaleontology and Stratigraphy** at Wadia Institute of Himalayan Geology, Dehradun (November 18th – 20th, 2013).
12. Mukund Sharma, **S.K. Pandey**, 2016. Behavioral and taphonomical testimony of *Tretichnus pedum*, inferences from the Nagaur Sandstone, Marwar Supergroup, India. **35th International Geological Congress, CapeTown, South Africa (Paper No. 3612)** (27th August - 4th September 2016).
13. Mukund Sharma, **S.K. Pandey**, 2016. Observation on the Lower Cambrian ichnospecies *Monomorphichnus multilineatus* recorded from the Marwar Supergroup, India: A review. **35th International Geological Congress, Cape Town, South Africa (Paper No. 3766)** (27th August – 4th September 2016).
14. Uday Bhan, Mukund Sharma, Deepak Singh, **S.K. Pandey**, D.K. Gupta, Deepak Singh Maurya, Pradeep Joshi, 2016**.** Mesoproterozoic carbonaceous remains and microfossils from the Semri Group sediments, Maihar area, Satna district Madhya Pradesh, India: Implications in Age and Palaeoenvironment. **National conference & Field Workshop on Precambrian of India**, Bundelkhand University (22-24 November 2016), 113.
15. Arif Ansari, **S.K. Pandey**, Mukund Sharma, Shailesh Agarwal, Yogesh Kumar, 2016. Stable carbon and oxygen isotope stratigraphic evidence of Shuram Excursion and Pc-C boundary in Bilara carbonate sequence of Rajasthan, Vol. 19. **EGU General Assembly 2017**.
16. **S.K. Pandey**, Mukund Sharma, 2017. Meter-scale Ediacaran seaweed: Testimony from the Sonia Sandstone, Jodhpur Group, Marwar Supergroup, India. **International Symposium on the Ediacara-Cambrian Transaction (ISECT-2017)**.
17. Mukund Sharma, **S.K. Pandey**, S. Ahmad, 2017. Ichnofossils diversity and constraints on the age of the Cambrian Nagaur Group, Marwar Supergroup, India. **International Symposium on the Ediacara-Cambrian Transaction (ISECT-2017).**
18. Bin Wan, Zhe Chen, Xunlai Yuan, Ke Pang, Chengguo Guan, Xiaopeng Wang, **S.K. Pandey**, Shuhai Xiao, 2018. A tale of three taphonomic modes: *Flabellophyton* from the Ediacaran Lantian and Dengying formations in South China, 329. **5th International Paleontological Congress, Paris** (9-13th July, 2018)
19. **S.K. Pandey**, Bin Wan, Xunlai Yuan, Mukund Sharma, Shamim Ahmad, A.H. Ansari, 2018. Ediacaran benthic macro-metaphyte/seaweed: A feasible source for sustenance of large body plan of Ediacara biota, 17-18. **International Conference on Ediacaran and Cambrian Sciences**, Xian, CHINA (12-16th August 2018).
20. S. Ahmad, **S.K. Pandey**, 2018. Life in Late Neoproterozoic to Early Cambrian biosphere: Insight from the Marwar Supergroup, 55-56. **International Conference on Ediacaran and Cambrian Sciences**, Xian, CHINA (12-16th August 2018).

21. A.H. Ansari, **S.K. Pandey**, Mukund Sharma, Shailesh Agrawal 2019. Hydrologically controlled late Ediacaran Extreme Negative Carbon Isotope Excursion (EENCE). **Goldschmidt 2019**, Barcelona, **SPAIN** (18-23rd August 2019)
22. **S.K. Pandey**, Bin Wan, Xunlai Yuan, Mukund Sharma, Shamim Ahmad, A.H. Ansari, 2019. Large body-plan of Ediacara biota and its relationship with Metaphytes. **International symposium on Fossil Algae**, BSIP, Lucknow, India (September 2019)
23. S. Ahmad, A. Srivastava, M. Sharma, **S.K. Pandey**, A.H. Ansari, P. Srivastava, 2019**.** Diversification, behavioural traits and palaeoecology of burrows: a case study from the Cambrian Nagaur Sandstone, Marwar Supergroup, Rajashtan, India. International Congress on Ediacaric and Ediacaric-Cambrian transit (Guadalupe, Extremadura, Spain, October 17-24, 2019.
24. **Pandey, S.K.**, Bykova, N., Sharma, M., Karlova, G.A., Ansari, A.H., Kumar, Y., Ahmad, S., Pandit, M.K. (2019). Current status of the Ediacaran-Cambrian Bilara Group, Marwar Supergroup, India. International Congress on Ediacaric and Ediacaric-Cambrian transit (Guadalupe, Extremadura, Spain, October 17-24, 2019.
25. **S.K. Pandey**, Mukund Sharma, Deepak Singh, Udai Bhan, Shamim Ahmad, 2019. Acritarch assemblage from the Neoproterozoic Bhander Group, Vindhyan Supergroup, India. **XXVII Indian Colloquium on Micropaleontology and Stratigraphy**, Banaras Hindu University, India. (November 2019)
26. Divya Singh, **S.K. Pandey**, Mukund Sharma, A.H. Ansari, 2019. Carbonate Fan-fabric in time and space: A case study from Palaeoproterozoic Kajrahat Limestone, Vindhyan Supergroup, India. **XXVII Indian Colloquium on Micropaleontology and Stratigraphy**, Banaras Hindu University, India. (November 2019)
27. Shamim Ahmad, Mukund Sharma, A.H. Ansari, Veeru Kant Singh, **S.K. Pandey**, Shailesh Agrawal, 2019. Evidence of oxygenation pulse recorded from the Buxa Formation (Sikkim), NE Lesser Himalaya, India. **XXVII Indian Colloquium on Micropaleontology and Stratigraphy**, Banaras Hindu University, India. (November 2019)
28. **S.K. Pandey**, Mukund Sharma, Shamim Ahmad 2023. The Current Chronostratigraphic Status of Bhander Group of the Vindhyan Supergroup. **Vindhyan Supergroup: Recent advancements, challenges, and Opportunities (VISACOP)** organized by the Geological Survey of India, Northern Region, Lucknow on 18th October 2023.
29. Shamim Ahmad, **Santosh K. Pandey**, Mukund Sharma 2023. Unveiling the Enigma: *Dickinsonia tenuis* of Retallack et al., 2021 - Not a Fossil, but the Imprint of a 'Fallen Beehive' 2023. **Vindhyan Supergroup: Recent advancements, challenges, and Opportunities (VISACOP)** organized by the Geological Survey of India, Northern Region, Lucknow on 18th October 2023.

PAPER PRESENTATION IN CONFERENCE (INDIA)

- **Vindhyan Supergroup: Recent advancements, challenges, and Opportunities (VISACOP)** organized by the Geological Survey of India, Northern Region, Lucknow on 18th October 2023.
- **XXVII Indian Colloquium on Micropaleontology and Stratigraphy**, Banaras Hindu University, India. (November 2019)
- **International symposium on Fossil Algae**, BSIP, Lucknow, India (September 2019).
- **XXIV Indian Colloquium on Micropaleontology and Stratigraphy** at Wadia Institute of Himalayan Geology, Dehradun (November 18th – 20th, 2013).
- **XXI Indian Colloquium on Micropalaeontology and Stratigraphy**", held at Birbal Sahni Institute of Palaeobotany, Lucknow, INDIA (November 16-17, 2007).
- **International Conference on Precambrian Sedimentation and Tectonics and second GPSS Meeting.** IIT, Bombay, INDIA (10-12 December 2007).

PAPER PRESENTATION IN CONFERENCE (ABROAD)

- **World Conference on Paleontology and Stratigraphy (WCPS_2011),** Nakhon Ratchasima 30000, **THAILAND**. (28th November – 02nd December 2011)
- **56th Annual Meeting of the Palaeontological Association,** University College Dublin, **IRELAND**. (16th -18th December 2012)
- **International Conference on Ediacaran and Cambrian Sciences (ICECS 2018), Northwest University, Xi'an, CHINA**. (12-16th August 2018)

FIELD WORKSHOP ORGANIZED

- **Organizing Secretary: "**National Geo-heritage field workshop on Zawar ancient metallurgical national geological monument & Jhamarkotra stromatolite (fossil algae) National Geological Monument" held at Udaipur organized jointly by SES, Lucknow; BSIP, Lucknow; Rajasthan Tourism; JRNRV, Udaipur (3-4 March 2023).

INVITED TALK

- Presented on topic: "**The Glimpse of the Proterozoic basins of India: Gap and goals**" In **Nanjing Institute of Geology and Palaeontology (NIGPAS)**, Nanjing, **CHINA.** (12th September 2016)
- Presented on topic: "**Ediacaran benthic algae/seaweed: A feasible source of sustenance for large body plan of first animal(s)**" under the e-Training courses on "Micropalaeontology and C^{14} Dating" (21-31 July 2020) **organized by The Regional Training Division, GSI-NR, Lucknow** on 29th July 2020.
- Presented on topic: **Status of the Bhander Group (the youngest succession of the Vindhyan Basin) and correlation: A promising window to encounter the Ediacaran biosphere**! under the e-training on "Course on sedimentary mapping techniques in Vindhyan" from 22/11/2021 to 27/11/2021 **organized by Regional Training Division, GSI-NR, Lucknow** on 24th November 2021.
- Presented (Online) on topic: "**Life & Environment on the Earth**" on the occasion of International Fossil Day in **Department of Geology, MLSU, Udaipur** under the Student Chapter of The Palaeontological Society of India. (20th October 2023)

FIELD WORKSHOP

- Field training on "**Himalayan Mapping Techniques**" organized by Geological Survey of India (Northern Region) in Kaza, Lahaul -Spiti, Himachal Pradesh. (15th to 29th July 2019).
- Field Trip **(From Snowball Earth to the Cambrian Explosion: Rocks and Fossils in the Yangtze Gorges area)** in International Conference on Ediacaran and Cambrian Sciences (ICECS 2018) by Northwest University, Xi'an, China. (9th-12th August 2018)
- **International Field workshop on Marwar Supergroup, western Rajasthan** organized by *The Society of Earth Scientists* (SES), Lucknow (20th -28th January 2014)
- **International Field workshop on Vindhyan Supergroup, central India** organized by *The Palaeontological Society of India*, Lucknow & Centre of Advanced Study in Geology, University of Lucknow. (21st -31st January 2010)
- **International Conference on Precambrian Sedimentation and Tectonics and second GPSS Meeting**." IIT, Bombay, (10th-12th December 2007)

TRAINING COURSES ATTENDED

- **Workshop On new techniques in Palaeobiology** conducted by Nanjing Institute of Geology and Palaeontology CAS, Nanjing, CHINA (November 16th – 18th 2016)
- **INSIDE RAMAN** Seminar conducted by Indian Institute of Science Education and Research (IISER), Mohali. (December 10th - 11th 2015)
- Participated in Workshop and Training Programme on **Acritarchs**: Morphological aspects & significance in Palaeobiological studies conducted by **Prof. Shuhai Xiao** at Birbal Sahni Institute of

Palaeobotany, Lucknow. (January 7th -10th, 2014)

- Participated in course work on **Palaeosols** conducted by **Prof. Gregory John Retallack** held at Birbal Sahni Institute of Palaeobotany, Lucknow. (November 6th -12th, 2013)
- Participated in **Training programme on Palynology in Fossil Fuel Exploration organized** by Birbal Sahni Institute of Palaeobotany, Lucknow, India. (September 10th -15th, 2012)
- Participated a DST-NRDMS Winter school on **"Geomatic Engineering, Principles and Application" Sponsored by NRDMS Division, DST New Delhi and organized by Department of Civil Engineering at Indian Institute of Technology, Roorkee.** (December 26th, 2005 - January 14th, 2006)
- Undergone 2 weeks **Training Programme on Remote Sensing and GIS- Application for Geologist and Geographers in Remote Sensing Application Center,** Lucknow, U.P. (November 14th – 25th, 2005)

PH.D. STUDENT

1. **Mrs. Divya Singh** (Co-Supervisor): Banaras Hindu University, Varanasi (Ongoing).

M.Sc. DISSERTATION

1. **Ms. Umme Kulsum**, M.Sc. (Geology), Semester-IV, Banasthali Vidyapith, Rajasthan (2019).
   Title: Palaeobiological Investigation of *Chuaria*: Insight from the Bhander Limestone, Vindhyan Supergroup, INDIA.
2. **Ms. Ayushi Srivastava**, M.Sc. (Geology), Semester-IV, University of Lucknow, Lucknow (2019).
   Title: Behavioural traits, palaeoecology and diversification of Burrows: A case study from the Nagaur Sandstone, Marwar Supergroup, Rajasthan.
3. **Ms. Dolly**, M.Sc. (Geology), Semester-IV, Banasthali Vidyapith, Rajasthan (2019).
   Title: *Chuaria-Tawuia* assemblage from the Neoproterozoic Sirbu Shale, Bhnader Group, Vindhyan Supergroup, India: Insights from microscopy and spectroscopy.
4. **Ms. Mrinalini Shukla**, M.Sc. (Geology), University of Lucknow, Lucknow (2020).
   Title: Burrow system in Kachchh Basin, Gujarat, India & their palaeoecological significance in Phanerozoic Eon.

REVIEW OF MANUSCRIPT FOR JOURNALS: 1) Paleontology, 2) Historical Biology, 3) Gondwana Research, 4) Precambrian Research, 5) Geological Journal, 6) The Palaeobotanist, 7) The Paleontological Society of India, 8) PlosOne.

FIELD WORK

- A short field has been jointly organized by Birbal Sahni Institute of Palaeobotany and Geological Survey of India in the month of November 2013 to Subathu, Dagshai (Eocene to Miocene age) around Solan area (Himachal Pradesh, India). From the BSIP, Prof. Sunil Bajpai (Director, BSIP), Dr. Vivesh V. Kapur (Scientist B) and I were actively participated along with distinguished scientist ***Prof. Gregory J. Retallack*** (University of Oregon, USA) and officers from GSI also joined us in field.

- ~20 days Field work has been carried out with **Prof Dr. Xunlai Yuan, Dr. Bin Wan Mr. Shao Ye Fei (NIGPAS) and Qing Tang (VT, USA)** in two parts; first to have detailed field work in Yichang district, Hubei Province; Zhangjiajie, Hunan Province; Huangshan district, Anhui Province, CHINA to explore the Cryogenian to Cambrian stratified succession of the Yangtze Gorge Platform of south China (Doushantuo, Dengying, Neutitang and Hetang Formation).

- ~15 days field work in Lantian town, Huangshan district, South Anhui Province, CHINA (Yangtze Gorge Platform, South China) to explore the Ediacaran Lantian Formation and collection of well-preserved metazoans and metaphytes for further studies.

MEMBERSHIP of PROFESSIONAL SOCIETIES

- Life Membership of the Indian Science Congress Associations **(ISCA)**
- Life Membership of The Palaeontological Society of India, Lucknow **(PSI)**

SCIENCE NEWS

https://dst.gov.in/indian-scientists-refute-earlier-find-fossil-earliest-animal-bhimbetka
https://pib.gov.in/PressReleseDetailm.aspx?PRID=1932919

EXTRA-CURRICULAR ACTIVITY

- Live phone-in educational talk on the topic: **Evolution of Life** on educational FM radio Gyanvani, Lucknow governed by **Ministries of HRD and Information & Broadcasting** on 10th March 2018 at 7.00 PM.
- Given a talk on **"Origin of life and journey towards the emergence of first animal"** under **Pre-Event-Outreach Programme** of **India International Science Festival (IISF) 2018.** (28th September 2018)
- Given talk on "**Origin of Life & When the LIFE got BIG!**" under **National Science Day** on 28th February 2019.
- Given interview on "**Secret of Vindhyan hill ranges**" on 'Live History India' available on You-tube online platform. https://www.youtube.com/watch?v=C4laCgr43wE

` (***Dr Santosh Kumar Pandey***)