

**Dr. Mukund Sharma**  
Scientist 'F'

### RESEARCH INTEREST

Mukund is interested in understanding the evolution of early life on the Earth. His endeavors are targeted on Archaean and Proterozoic rocks to find its clues. Besides, he is collaborating with the forces in the field for biogeochemistry of palaeobiological evidence, early diversification prokaryotic metabolisms, radiation of eukaryotic forms and large complex megascopic remains.

### INTERNATIONAL COLLABORATIONS

Prof. J .W. Schopf, Department of Earth and Space Sciences, UCLA, USA  
Prof. V. N. Sergeev, Geological Institute, Russian Academy of Sciences, Moscow  
Prof. Shuhai Xiao, Department of Geosciences, Virginia Tech, USA  
Prof. Patricia Vickers-Rich, School of Geosciences, Monash University, Melbourne  
Prof. Sun Weiguo, NIGPS, Nanjing, P.R. China  
Prof. Jochen Brock, Research School of Earth Sciences, ANU Canberra, Australia  
Prof. Kevin Lepot, Dept of Geoscience, University of Wisconsin, Madison, USA

### AWARDS AND HONOURS

1. ISCA Young Scientist Award, 1992
2. ISRO Conference Best Poster Award, 1992
3. DST Young Scientist Project 1995
4. DST - BOYSCAST Fellowship, 1996
5. Govt. of India-Chinese Government Fellowship, 1996
6. DST-ILTP Project Member 2001
7. DST, India-GINRAS, Russia ILTP-Project 2006
8. Iyengar-Sahni Gold Medal 2009
9. Sharda Chandra Gold Medal 2009 by the Palaeontological Society of India
10. Diamond Jubilee Medal-2010 of BSIP
11. Indian Coordinator, DST-RFBR (Indo-Russian) Project (2011-13)

### FELLOWSHIP / MEMBERSHIP OF PROFESSIONAL SOCIETIES

1. President, The Society of Earth Scientists, India
2. Voting Member, ICS, Sub-commission on Cryogenian Stratigraphy (2012-17)
3. Corresponding Member, ICS, Sub-commission on Ediacaran (2012-17)
4. Indo-Australian Senior Scientist Fellowship of DST-ASA 2012-13.
5. Member, IGCP -587 (2011-2014)
6. Fellow - The Geological Society of India, Bangalore, India
7. Fellow - The Palaeontological Society of India, Lucknow, India
8. Fellow - The Palaeobotanical Society, Lucknow, India
9. Fellow - Indian Association of Sedimentologists, Aligarh, India
10. Life Member - Indian Geological Congress, Roorkee, India
11. Life Member - Indian Science Congress Association, Kolkata, India
12. Life Member - National Academy of Sciences India, Allahabad, India
13. Life Member - Himalayan Geology, Dehradun, India
14. Life Member - Gondwana Geological Society, Nagpur, India
15. Life Member - Society of Earth Scientists, Lucknow, India
16. Member - Current Science Association, Bangalore, India

## PROFESSIONAL EXPERIENCE

2013-	Scientist-F
2006-2013	Scientist-E
2001-2006	Scientist-D
1996-2001	SSO/Scientist-C
1988-1996	JSO
1988-1988	Senior Research Fellow
1986-1988	Junior Research Fellow

## PROFESSIONAL SERVICES

2016	Coordinator, NASA Spaceward Bound India Programme-2016
2014	Organizing Secretary, International Field Workshop on Marwar Supergroup
2010	Organizing Secretary, International Field Workshop on Vindhyan
2009	Course –Coordinator “ <i>Sedimentology and sequence stratigraphy</i> ”
2009	Organizing Secretary, <i>Conclave on Evolution: Life’s Continuum</i> ,
2005	Organizing Secretary, BSIP Diamond Jubilee Conference

## COMPLETE LIST OF PUBLICATIONS

(Up to Dec. 2016; Request for PDF may be sent to [sharmamukund1@rediffmail.com](mailto:sharmamukund1@rediffmail.com))

1. Pandey, S. K. & SHARMA, MUKUND (2016). Enigmatic Ediacaran megascopic bedding plane structures on the Sonia Sandstone, Jodhpur Group, Marwar Supergroup, India: seaweed or problematica. *Geological Journal*/DOI: 10.1002/gj.2840.
2. Bandana, Shukla & SHARMA, MUKUND (2016). A new assemblage of large sized microfossils from the Salkhan Limestone (>1600 Ma), Semri Group, Vindhyan Supergroup, India. *Journal of the Palaeontological Society of India* 61(2): 287-299.
3. SHARMA, MUKUND & Yogmaya Shukla (2016). The Palaeobiological remains of Owk Shale, Kurnool Basin: A discussion on the age of the Basin. *Journal of the Palaeontological Society of India* 61(2): 175-187.
4. Singh, V. K. & SHARMA, MUKUND (2016). Mesoproterozoic organic walled microfossils from the Chaporadih Formation, Chandarpur Group, Chhattishgarh Supergroup, Odisha, India. *Journal of the Palaeontological Society of India* 61(1): 75-84.
5. SHARMA, MUKUND, Tiwari, M, Ahmad, S., Shukla, R., Shukla, B., Singh, V. K., Pandey, S.K., Ansari, A. H. , Shukla, Y. & Kumar, S., (2016). Palaeobiology of Indian Proterozoic and Early Cambrian Successions-Recent Developments. *Proceedings Indian National Science Academy*, 82(3): 559-579.
6. SHARMA, MUKUND, Banerjee, D. M. & Santosh, M. (2014). Proterozoic Basins of India. *Journal of Asian Earth Sciences* 91: 227-229.
7. Shuhai, Xiao & SHARMA, MUKUND (2014). International Field Workshop on the Marwar Supergroup, Rajasthan, India. *Episodes* 40(1): 74-75.
8. Dayal, A. M., Mani, D., Madhavi, T., Kavitha, S., Kalpana, M. S., Patil, D. J. & SHARMA, MUKUND (2014). Organic geochemistry of the Vindhyan sediments: Implications for hydrocarbons. *Journal of Asian Earth Sciences* 91: 329-338.
9. SHARMA, MUKUND & Mathur, S. C. (2014). *Arumberia*-Like Ediacaran Mat Structure from Sonia Sandstone, Marwar Supergroup, Rajasthan, India. *In: Geo*

Resources Shrivastava, K. L. & Kumar, A. (Editors): 626-631, Scientific Publishers (India).

10. SHARMA, MUKUND & Shukla Yogmaya (2012). Mesoproterozoic carbonaceous fossils from the Neoproterozoic Bhima Basin, Karnataka, South India. *Geological Society London, Special Publications* 366: 277-293.
11. SHARMA, MUKUND & Shukla, Yogmaya (2012). Occurrence of helically coiled microfossils *Obruchevella* in the Owk Shale of the Kurnool Group and its significance. *Journal of Earth System Science*, 121(3): 755-768.
12. SHARMA, MUKUND, Kumar, S, Tiwari, Meera, Shukla, Yogmaya, Pandey, S K, Srivastava, Purnima and Banerjee, Santanu (2012). Palaeobiological Constraints and the Precambrian Biosphere: Indian Evidence. *Proceedings Indian National Science Academy*, 78(3): 407-422.
13. Sergeev, V. N. SHARMA, MUKUND & Shukla, Yogmaya (2012). Proterozoic fossil Cyanobacteria. *Palaeobotanist* 61: 189-358.
14. SHARMA, MUKUND & Pandey S. K. (2012). Stromatolites of the Kaladgi Basin, Karnataka, India: their systematics, biostratigraphy and age implications. *Palaeobotanist* 61: 103-121.
15. McKenzie, N. R., Hughes, N, Myrow, P. M., Xiao, Shuhai, SHARMA, MUKUND (2011). Correlation of Precambrian-Cambrian sedimentary successions across northern India and the utility of isotopic signature of Himalayan lithotectonic zones. *Earth and Planetary Science Letters* 312: 471-483.
16. SHARMA, MUKUND, Bajpai, Usha, Shukla, Yogmaya, and Shukla, Manoj (2010). Ultrastructure and morphological studies of Early Mesoproterozoic *Chuarina circularis*: A case study from the Vindhyan Supergroup. *Journal of the Palaeontological Society of India* 58: 51-58.
17. SHARMA, MUKUND & Shukla Yogmaya (2009). The evolution and distribution of life in the Precambrian eon-Global perspective and the Indian record. *Journal of Biosciences* 34: 765-776.
18. SHARMA, MUKUND, Mishra, Sanjay, Dutta, Suryendu, Banerjee, Santanu & Shukla, Yogmaya (2009). On the affinity of *Chuarina-Tawuia* complex: A multidisciplinary study. *Precambrian Research* 173: 123-136.
19. SHARMA, MUKUND & Shukla Yogmaya (2009). Mesoproterozoic coiled megascopic fossil *Grypania spiralis* from the Rohtas Formation, Semri Group, Bihar, India. *Current Science*: 96: 1636-1640.
20. SHARMA, MUKUND & Shukla, Yogmaya (2009). Taxonomy and affinity of Early Mesoproterozoic megascopic helically coiled and related fossils from the Rohtas Formation, the Vindhyan Supergroup, India. *Precambrian Research* 173: 105-122.
21. SHARMA, MUKUND (2008). Neoproterozoic biotic signature in peninsular Indian basins: an overview. *Memoir Geological Society of India* no 74:119-131.
22. Sergeev, V.N. & SHARMA, MUKUND (2008). Mesoproterozoic silicified microbiotas of Russia and India—characteristics and contrast. *Palaeobotanist* 57:323-358.
23. SHARMA, MUKUND (2008). Stromatolites studies in India: an overview. *Palaeobotanist* 57: 63-67.
24. SHARMA, MUKUND (2007). Micropalaeontology: Application in stratigraphy and Paleooceanography. Sinha, Devesh (Editor), Narosa Publishing House, New Delhi, 318 pp. (Review) in *Jour. geol. Soc. India*, 70:169-171.

25. SHARMA, MUKUND (2006). Small-sized Akinetes from the Mesoproterozoic Salkhan Limestone, Semri Group, Bihar, India. *Jour. Palaeontol. Soc. India*, 51: 109-118.
26. SHARMA, MUKUND (2006). Late Palaeoproterozoic (Statherian) Carbonaceous films from the Olive Shale (Koldaha Shale), Semri Group, Vindhyan Supergroup, India. *Jour. Palaeontol. Soc. India*, 51: 27-35.
27. SHARMA, MUKUND (2006). Palaeobiology of Mesoproterozoic Salkhan Limestone, Semri Group, Bihar, India: Systematics and significance. *Jour. Earth System Science*, 115: 67-98.
28. SHARMA, MUKUND (2006). Citation Index and Impact Factor in Scientific publications. *Curr. Sci.*, 90:748.
29. SHARMA, MUKUND (2004). Bio-Diversity in Indian Proterozoic basins. *Geophytology*, 33: 87-98.
30. SHARMA, MUKUND & Shukla M. (2004). A new Archaeal stromatolite from Chitradurga Group, Dharwar Craton, India and its significance. *Palaeobotanist*, 53: 5-16.
31. SHARMA, MUKUND & Sergeev, V.N. (2004). Genesis of carbonate precipitates patterns and associated microfossils in Mesoproterozoic formations of India & Russia. *Precambrian Research* 134: 317-347.
32. SHARMA, MUKUND (2003). Age of Vindhyan—Palaeobiological Evidence: A paradigm shift (?). *Jour. Palaeontol. Soc. India*, 48: 177-200.
33. SHARMA, MUKUND & Shukla, M. (2003). Studies in Palaeo-Mesoproterozoic stromatolites from the Vempalle and Tadpatri formations of Cuddapah Supergroup, India. In: *Vistas in Palaeobotany and Plant morphology: Evolutionary and Environmental Perspectives*, (Srivastava, P.C. Editor) pp.1-25, U.P. Offset, Lucknow.
34. SHARMA, MUKUND (2003). Vindhyan vagaries. *Curr. Sci.*, 84: 1293-1296.
35. SHARMA, MUKUND (2003). Report on the International Field Workshop on the Vindhyan Basin, Central India. *Jour. geol. Soc. India*, 61: 623-625.
36. SHARMA, MUKUND (2002). Palaeontology in India at crossroads. *Curr. Sci.*, 82: 913-917.
37. SHARMA, MUKUND (2001). Biostratigraphic study of stromatolites and microbiota of the Chhattisgarh basin, M.P. India by Moitra, A.K. *Jour. geol. Soc. India*, 57: 287-289.
38. Raaben, M.E., Sinha, A.K. & SHARMA, MUKUND (2001). Precambrian stromatolites of India & Russia. Monograph 3, Birbal Sahn Institute of Palaeobotany, Lucknow 125 pp. (Monograph).
39. Sinha, A.K. & SHARMA MUKUND (2000). 31<sup>st</sup> International Geological Congress—A Report. *Palaeobotanist*, 49: 540-543.
40. Kumar, B., Das Sharma, Shukla, M. & SHARMA, MUKUND (1999). Chrono-stratigraphic implications of Carbon and Oxygen isotopic composition of the Proterozoic Bhima carbonates, Southern India. *Jour. geol. Soc. India*, 53: 593-600.
41. SHARMA, MUKUND & Shukla, M. (1999). Carbonaceous megaremain from the Neoproterozoic Owk Shales Formation of the Kurnool Group, Andhra Pradesh, India. *Curr. Sci.*, 76: 1247-1251.

42. Patil, Shilpa, Peshwa, V.V., Nair, Sushma, SHARMA, MUKUND, Shukla, M. & Kale, V. S. (1999). Occurrence of a Manganese-Bearing Horizon in the Kaladgi Basin. *Jour. geol. Soc. India*, 53: 201-204.
43. SHARMA, MUKUND & Shukla, M. (1998). Diversity and gigantism of carbonaceous remains in Neoproterozoic successions of the Indian segment of Gondwana. *J. African Earth Sci.*, 27(1A): 178-179.
44. Riding, Robert & SHARMA, MUKUND (1998). Late Palaeoproterozoic (~1800-1600 Ma) stromatolites, Cuddapah Basin, Southern India: cyanobacterial or other bacterial microfibrils? *Precambrian Res.*, 92: 21-35.
45. SHARMA, MUKUND & Shukla, M. (1998). Microstructure and microfabric studies of Palaeoproterozoic small digitate stromatolites (Ministromatolites) from the Vempalle Formation, Cuddapah Supergroup, India. *Jour. Palaeontol. Soc. India*, 43: 89-100.
46. SHARMA, MUKUND, Nair, Sushma, Patil, Shilpa, Shukla, M. & Kale, V. S. (1998). Tiny digitate stromatolite (*Yelma digitata* Grey), Chitrabhanukot Formation, Kaladgi Basin, India. *Curr. Sci.*, 74: 360-364.
47. SHARMA, MUKUND (1996). Microbialites (stromatolites) from the Mesoproterozoic Salkhan Limestone, Semri Group, Rohtas, Bihar: Their systematics and significance. *Mem. geol. Soc. India*, 36: 167-196.
48. Venkatachala, B.S., SHARMA, MUKUND & Shukla, M. (1996). Age and Life of the Vindhyan—Facts and Conjectures. *Mem. geol. Soc. India*, 36: 137-165.
49. SHARMA, MUKUND, Mathur V.K., Srivastava M.C. & Shukla, M. (1994). Systematics and significance of microbialite (stromatolite) *Stratifera undata* from Mussoorie syncline, Lesser Himalaya, India. *J. geol. Soc. India*, 43: 705-712.
50. Venkatachala, B.S., Shukla, M. & SHARMA, MUKUND (1992). Plant Fossils—A Link with the Past. Publications and Information Directorate, CSIR, New Delhi, 63 pp. (Book).
51. Shukla, M., Misra, P.K. & SHARMA, MUKUND (1992). Chemical degradation of some extant cyanobacteria with special reference to Precambrian contamination. *Palaeobotanist*, 39: 327-332.
52. SHARMA, MUKUND (1992). Shukla, M. & Venkatachala, B.S. Metaphytes and metazoan fossils from Precambrian sediments of India—A critique. *Palaeobotanist*, 40: 8-51.
53. Shukla, M. & SHARMA, MUKUND (1992). Precambrian Palaeobiology: Goals & Gaps. *Geophytology*, 22: 41-47.
54. Shukla, M., SHARMA, MUKUND, Bansal, R. & Venkatachala, B.S. (1991). Pre-Ediacaran assemblage from India and their evolutionary significance. *Mem. geol. Soc. India*, 20: 169-180.
55. Shukla, M. & SHARMA, MUKUND (1990). A need to intensify search for palaeobiological activities in the Precambrian. *Mem. geol. Soc. India*, 18: 73-76.
56. Shukla, M. & SHARMA, MUKUND (1990). Palaeobiology of Suket Shales, Vindhyan Supergroup—Age implications. *Geol. Surv. India Spl. Pub.*, No. 28: 411-434.
57. Venkatachala, B.S., Shukla, M., SHARMA, MUKUND, Naqvi, S.M., Srinivasan, R. & Udairaj, B. (1990). Archaean Microbiota from the Donimalai Formation, Dharwar Supergroup, India. *Precambrian Res.*, 47: 27-34.

58. Manoharachari, C., Shukla, M. & SHARMA, MUKUND (1990). Problem of fungal contamination in Precambrian Palaeobiology—A cautionary note. *Palaeobotanist*, 37: 292-298.
59. Venkatachala, B.S., Naqvi, S.M., Chadha, M.S., Shukla, M., Srinivasan, R., Kumar, B., Mathur, R., Balram, V., Natarajan, R., SHARMA, MUKUND, Udairaj, B., Subba Rao, D.V., Manikyamba, C., Krishna Murthy, B.S.S. & Bansal, R. (1989). Geology, Geochemistry, Palaeobiology of Precambrian stromatolites and associated sedimentary rocks from the Dharwar Craton, constraints on Archaean biogenic processes. *Him. Geol.*, 13: 1-20.
60. Shukla, M., Venkatachala, B.S. & SHARMA, MUKUND (1989). Interaction of Lithosphere and Biosphere: Some evidences from Early Metazoa and Metaphytes from India. *XX Lunar and Planetary Science Conference NASA, Houston, Texas*. Part.3: 1012-1013.
61. Venkatachala, B.S., SHARMA, MUKUND, Srinivasan, R., Shukla, M. & Naqvi, S.M. (1987). Bacteria from Archaean Banded Iron Formation of Kudremukh region, Dharwar Craton, South India. *Palaeobotanist*, 35: 200-203.
62. Naqvi, SM, Venkatachala, B.S., Shukla, M., Kumar, B., Natrajan, R. & SHARMA, MUKUND. (1987). Silicified cyanobacteria from the cherts of Archaean Sandur Schist Belt Karnataka, India. *J. geol. Soc. India*, 29: 533-539.