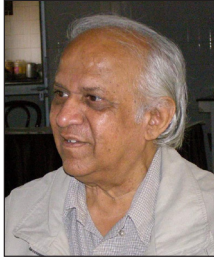




## OBITUARIES



**Indra Bir Singh**  
08/07/1943 – 11/02/2021

Prof. Indra Bir Singh, a renowned sedimentologist who touched several generations of geologists of the country, passed away after brief illness on February 11, 2021. He was born on 8<sup>th</sup> July 1943 in Lucknow, Uttar Pradesh, India. He had obtained college education from the Lucknow Christian College. In 1956, he joined the University of Lucknow for the higher education from where he graduated (B.Sc. Hons.-1961) and post graduated (M.Sc.-1962) in Geology. For a brief period he worked in Oil and Natural Gas Corporation before he followed his research calling. He received Dr. Rer. Nat. from the Technical University, Stuttgart, Germany with a fundamental thesis on the "Sedimentology of the Keuper-Lias boundary layers, Württemberg". In the following year he joined Senckenberg Institute, Wilhelmshaven, Germany as Research Associate. He spent two years (1967-1968) as Post-doctoral fellow at the Oslo University, Norway. Later, he returned to Senckenberg Institute and worked from 1969 to 1972 on modern shallow marine sediments. In 1972, Prof. Singh returned to India and joined the Department of Geology, University of Lucknow.

Prof. Singh's contributions range from revolutionising the thoughts on the stratigraphy of the Lesser Himalaya to reinterpret the history of deposition of Vindhyan of Central India, Bagh-Lameta beds, Jurassic succession of western India, Siwaliks, Karewas of Kashmir and Deltas of East Coast. For a long time, the Krol - Tal sequence of the Lesser Himalaya was considered a Mesozoic succession but his observations and arguments challenged this contention. Subsequently, he and his students demonstrated that it is a Precambrian-Cambrian succession. These studies provided an in depth understanding of the depositional processes based on Facies Analysis. His working group comprising several students identified the contribution of interfluvial (doab) processes in fluvial domain of the Ganga Plain which was a new discovery. This study provided insight in the nature of river systems, river morphometry, evolution of sand

bars, chronology to the Late Quaternary landform evolution, tectonic events and climate changes in the Ganga Plain. His contributions to archaeology on food grain domestication in India suggested early Holocene agricultural evolution and domestication of rice cropping in India.

He is known throughout the world for his seminal book 'Depositional Sedimentary Environments' co-authored with Prof. H. E. Reineck, published in 1973. This book is also translated in Russian and Chinese languages. Another book, 'Delta Sedimentation: East Coast of India' co-authored with A.S.R. Swamy is equally significant. Under his leadership, the Department of Geology got the rank of 'Centre of Advance Studies in Geology'. He served the department as the Head and the University as Dean, Faculty of Science. Prof. Singh's supervised 16 doctoral theses and published more than 200 research articles having citations exceeding 10,000.

His scientific contributions were widely recognized and several prestigious awards were bestowed on him. Prof. Singh was elected Fellow of Indian National Science Academy, New Delhi in 1995. He is the recipient of the National Mineral Award, Government of India (1996) and National Award for excellence in Earth System Science in the year 2013. L. Rama Rao Birth Centenary Award of the Geological Society of India. University of Lucknow recognized his outstanding contributions in 2020, during its centennial foundation day as illustrious faculty member. He was the Fellow of Alexander von Humboldt Foundation, Germany in 1988 – 1989. He served as a visiting professor at European and American universities including Uppsala/Sweden, Erlangen-Nuremberg, Halle/Saale, and Baton Rouge/Louisiana.

He was a teacher par excellence and an impeccable mentor always beaming with new ideas syncing his theoretical knowledge with his practical approach. His approach of teaching was different focussing more on the process rather than the outcome. He simplified even the most strenuous concepts with such an ease that it was apparent that his fundamentals were crystal clear. In his passing a void has been created which could not be filled. He is survived by his wife Mrs Janak Singh, two sons Shwetabh and Arunabh and scores of students and friends.

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**M. S. Srinivasan**  
09/10/1938 – 29/04/2021

One of the pioneers of micropalaeontology and palaeoceanographic studies in India Prof. M. S. Srinivasan, left for his heavenly abode on the morning of April 29, 2021. Prof. Srinivasan was born in the year 1938 in Varanasi. He graduated from the Banaras Hindu University (BHU) and later joined the Department of Geology, BHU in 1960 as a faculty member. British Commonwealth Fellowship facilitated his higher studies. He received Ph.D. degree in 1965 from the Victoria University, Wellington, New Zealand. Subsequently he laid the foundation of Micropalaeontology teaching and research in the Department of Geology, BHU. Prof. Srinivasan was a passionate teacher and researcher, a dedicated supervisor in the research field of Marine Micropalaeontology & Palaeoceanography who along with his students initiated teaching and research in the field of Micropalaeontology in various universities and organizations across the country. He was popular amongst students as ‘Guruji’ and his close friends as ‘Cheenu’. Prof. Srinivasan remained very active even after his superannuation in 2001 and served as a guardian and a great source of inspiration for young generations working in the field. Besides, an outstanding scholar and a teacher, *Guruji* was exceptionally a humble human being and regarded as one of the most revered Earth scientists in the country.

Prof. Srinivasan is known for his extensively cited classic work on “Neogene Planktonic Foraminifera: A Phylogenetic Atlas” jointly written with Jim Kennett in 1983. His research interests were largely focused on Neogene foraminiferal biostratigraphy and palaeoceanographic evolution of the Indian and Pacific Oceans. He pioneered a systematic micropalaeontological study of the uplifted marine sequences of Andaman-Nicobar Islands and published the classical monograph on “Schwager’s Car Nicobar Foraminifera in the reports of Novara Expedition: A revision”. Prof. Srinivasan participated in the Deep Sea Drilling Project (DSDP) Leg-90 on board the D/V *Glomar Challenger* in the Southwest Pacific (1981-82) as a shipboard scientist. This association with DSDP accelerated Prof. Srinivasan’s efforts of initiating deep-sea research in the country. He was the Visiting Scientist at the British Museum (Natural History), London (1968-69), Graduate School of Oceanography, University of Rhode Island, USA (1972-74, 1979-81) and visited many other reputed institutes of the world for academic interaction including those in Canada, Japan, Netherlands, New Zealand, Russia Thailand, U.K., and U.S.A. He was the leader of the International Working Group on ‘Equatorial Pacific Neogene Chronostratigraphy’ and an executive member of the regional committee on ‘Pacific Neogene Events’. He chaired the IUGS National Committee twice and was a leading member

of several IGCP Programs and projects funded by the Govt. of India. He was a member/chairman of several scientific committees of various government organizations, academic and research institutions.

His scientific contributions spread over 180 research publications including 3 books, 1 monograph, chapters in various books and an edited volume. Prof. Srinivasan was the Fellow of the three national science academies and the Third World Academy of Sciences. Prof. Srinivasan received the UGC National Lecturer Award (1984-85), the First Malavia Memorial Trust Senior Academic Award by BHU (1986), Prof. L. Rama Rao Gold Medal of the Geological Society of India (1988), Platinum Jubilee Lecture of ISC (1991), Hari Om Ashram Trust Award by UGC (1994), Swami Pranavanad Saraswati Award (2001). He had the honour of delivering prestigious M. R. Sahni Memorial Lecture (1989), Platinum Jubilee Lecture of ISC (1991), Prof. Birbal Sahni Memorial Lecture (2002) and Dr. H. N. Siddiqui Memorial Lecture (2008).

As an excellent academician and administrator Prof. Srinivasan served as the Head, Department of Geology, BHU (1984-86) and the Director, Academic Staff College, BHU (1991-93). After his superannuation in 2001, he continued in the department as INSA Honorary Scientist (2001-2003) and INSA Senior Scientist (2003-2008). In recognition of his distinguished services, University honoured Prof. Srinivasan by appointing him as the Professor Emeritus in the Department of Geology, BHU. During his long illustrious career spanning almost 60 years, he motivated and inspired a whole generation of Indian (14 Ph.D. students) and overseas students. Prof. Srinivasan was a much admired and respected micropalaeontologist whose extensive research, passionate teaching and mentorship par excellence left a rich legacy to Indian Geology. He is survived by his wife Mrs. Lalitha Srinivasan and daughter Mrs. Jai Sree and other family members.

Prof. Srinivasan will always be remembered by all of us who had the privilege of knowing him and working with him.

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**Shashi Bhushan Bhatia**  
(18/03/1930 – 01/05/2021)

Prof Shashi Bhushan Bhatia was born on 18<sup>th</sup> March, 1930 at Lucknow. His father Dr B.B. Bhatia—a professor in the King George Medical College was a famous physician. Shashi Bhushan post graduated in 1950 from the University of Lucknow. Later, he obtained his Ph.D. degree from the London University and D.I.C. from the Imperial College, London. He joined the University of Lucknow as a lecturer in 1953. In 1958, he was selected in the Geological Survey of India. Subsequently in 1959 Prof Bhatia was appointed as a Reader in the newly created department of Geology in the Panjab University, Chandigarh, where he superannuated as a Professor and then continued as an Emeritus Professor.

Prof Bhatia's contributions to the Indian geology cover a vast time span. Foraminifera were his original field of specialisation. He is credited with the first discovery of the Permian foraminifera in India. Later, he made important contributions to the study of Cretaceous and Paleogene ostracods. His research on the Cretaceous sediments aided in determining the time of extinction of the dinosaurs and initiation of the Deccan Volcanicity. Another important input to the Cretaceous was report of bryozoa in the Neelkanth Formation—considered at that time a part of the Tal Group. The most important contributions made by Prof S. B. Bhatia, however, are to the Palaeogene sediments of the Himalaya. He studied fauna of the Subathu, Dagshai and Siwalik sequences. His findings precisely fixed the lower age limit of the Kakara sediments of at 56.5 Ma, which signifies the time of collision of the Indian and the Asian Plate. His research on the Subathu and the Dagshai formations makes significant contribution to the biostratigraphy, event stratigraphy and

environment of deposition of that time. He put India on the world map of Chara studies. He was an excellent teacher with exceptional skill of communication. He was a perfectionist and demanded the best from his students. No wonder many of his students earned International fame.

Prof Bhatia had around 250 publications in reputed journals. He guided a dozen students for Ph.D. degree. He was a highly decorated scientist. In 1958, he was appointed Indian Correspondent of the journal of Micropaleontology. He was a Fellow of the prestigious Indian National Science Academy and recipient of L. Rama Rao award. Oil and Natural Gas Corporation decorated him with a Silver plaque. He attended several International Conferences and brought laurels to self and the country.

Immaculately dressed, Prof Bhatia's interests included painting and photography. He was a keen Bridge player. He and Mrs Bhatia was perfect host to his students. Such was Prof. Shashi Bhushan Bhatia who breathed his last on May 1, 2021. The death came to him peacefully. He is survived by his wife, Mrs Sudha, son, Dr Shishu and daughter, Dr Sujata, they are going to miss him for all time to come. His death is a great loss to the Indian Geology and his students, who feel academically orphaned. With his upright nature, honest dealing and devotion to his duty, Prof Bhatia was a “*Karmath*” in real sense of the word, and which would have earned him an instant “*Moksha*”.

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**Satyendra Nath Bhalla**  
(01/07/1940 - 10/05/2021)

Prof. Satyendra Nath Bhalla, a pioneering benthic foraminiferal taxonomist in the country and an acclaimed teacher in micropalaeontology at the Aligarh Muslim University, breathed his last on 10<sup>th</sup> May 2021, after a brief period of illness. Prof. Bhalla was born on 1st July, 1940 at Basti, Uttar Pradesh, India to an extremely religious and disciplined father, Superintendent of Police, Shri. B. N. Bhalla and home-maker Smt. Vaishno Devi.

Having completed his early education at Colvin Taluqdars' College, Lucknow, he obtained his B.Sc. and M.Sc. (Geology) degrees from Aligarh Muslim University, Aligarh. Prof. Bhalla was awarded his Ph.D. on the foraminifera from the intertrappean beds of Rajahmundry in 1964, under the supervision of the famous Indian micropalaeontologist, Prof. S. B. Bhatia from Panjab University, Chandigarh. The other person who had inspired him was Prof. M. R. Sahni!

Prof. Bhalla joined the Department of Geology at Aligarh Muslim University as a Lecturer. He established the Micropalaeontology Lab in the Department and pioneered research on Jurassic foraminifera of Kutch, within a few years elevating it to a leading centre in India for research on Jurassic foraminifera and Recent Foraminifera from the Indian Coasts. The Department of Geology got fresh impetus in academics and research under his Chairmanship from 1990-1994. Prof. Bhalla was the first one to be awarded a Doctorate in Science (D.Sc.) from the Geology Department of AMU.

Prof. Bhalla had a distinguished research career of almost 60 years! Though his main focus was taxonomy and distribution of Recent and Jurassic foraminifera, he also worked on other microfossil groups, namely shark teeth and ostracods. He also employed microfossils in stratigraphic studies, geochronology, palaeoenvironmental and palaeobiogeographic studies, pollution studies and petroleum exploration. He pioneered work on the east coast of Gondwana and predicted the possibility of finding oil and gas in the onshore and off-shore Andhra Pradesh, way back in 1970. This was confirmed by the Oil and Natural Gas Commission (ONGC), Government of India, during their drilling operations in 1982. He was appointed as the Chairman of the Research Advisory Council of Birbal Sahni Institute of Palaeobotany, Lucknow by the Government of India in 2011.

Prof. Bhalla published 105 research papers and supervised six doctoral and several M. Phil. students. He was invited by the Elsevier Science Publishers, Holland, in 1983 to contribute to the book, 'Phanerozoic Geology of

the World: II. The Mesozoic'. He travelled worldwide upon invitations from British Council, London (1971 and 1975), Royal Society London (1994) and regularly from German Academic Exchange Service Bonn (1972, 1975, 1995 and 1997) to Germany for collaborations in advanced research in foraminifera and marine environment. In 1985, he visited the Museum of Natural History at Geneva, Switzerland, for advanced research on Jurassic foraminifera. In 1987, the Japan Society for Promotion of Science invited him to deliver lectures at different Universities and Institutes in Japan to further research on Recent benthic foraminifera of the Pacific Ocean. Besides, he visited and had research collaborations with U.K., Germany, France, Holland, Switzerland, U.S.A., Canada, Japan, UAE, Kuwait, Oman and Nepal.

Prof. Bhalla had a long association with the 'micropalaeontology movement' in India, i.e., the Indian Colloquium on Micropalaeontology and Stratigraphy (ICMS). In 1976, he successfully convened the 'V-ICMS' at the Aligarh Muslim University and presided over the 'XVII-ICMS' at Vikram University, Ujjain. The 'XVI-ICMS' in 1998 at Goa and in 2007, XXI ICMS at BSIP, Lucknow felicitated him for his significant contributions to Micropalaeontology and Stratigraphy. He was conferred the 'Lifetime Achievement Award' at the 'XXII-ICMS' held at Tiruchirapalli in 2009. In recognition to his contributions, the Palaeontological Society of India, Lucknow instituted the 'Prof. S. N. Bhalla Gold Medal in Micropalaeontology' in 2003, comprising a citation and a medal, awarded biennially to a researcher for outstanding contributions to micropalaeontology. A commemorative book entitled 'Micropalaeontology & its Applications' was published by us in 2017 as a mark of respect to his contributions to micropalaeontology.

Prof. Bhalla retired from the Aligarh Muslim University in 2002 from service but remained active in research by writing research papers, attending conferences and guiding research scholars. His passion for and dedication towards taxonomy in particular were unparalleled; one word of guidance he always gave budding taxonomists was, "*Don't be in a hurry to create a new taxon. Isolate at least 15 specimens, observe their proloculus, compare them with the original descriptions, and then take a call*".

Prof. Bhalla was a meticulous researcher, innovative thinker and an excellent teacher. He was modesty and dignity personified and a valued-, trusted-, friend, philosopher and guide to his associates. He is survived by his wife, son and daughter and a legacy of his students whom he inspired to carry the torch of micropalaeontology ahead! The sad demise of *Bhalla Sahab* (as he was fondly referred to) has left behind a deep void amongst the palaeontological community of India!

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**Anil Chandra**  
13/11/1944 – 16/04/2021

The pall of gloom descended when the news of sudden demise of Dr. Anil Chandra broke in the afternoon of 16<sup>th</sup> April 2021. Like me, it was a big shock for many who knew him as he possessed a charming and magnetic personality. Even a short period of association with him would turn anyone his admirer. Late Dr. Chandra was popular as 'Anil' amongst his seniors, friends and contemporaries and as 'Anil Saab' amongst others. He succumbed to the long persisting heart problem at the age of 76 years at Lucknow.

Anil was born on 13 November 1944 to Mr. Sri Chandra, and Mrs. Sharda Chandra at Balrampur District of Uttar Pradesh. After completing his early education at his native place, he joined University of Lucknow in 1960. He graduated in 1962 and secured M.Sc. (Geology) degree in 1964. Thereafter he joined the Birbal Sahni Institute of Palaeobotany (BSIP) (now Palaeosciences), Lucknow and studied fossil miospores, megaspores, seeds, acritarchs and plant megafossils from the various geological formations of South Rewa Gondwana Basin, Madhya Pradesh. As a research scholar, Anil worked on the plant mega and microfossils from the Lower Gondwana (Permian) sediments of Madhya Pradesh and was awarded Ph.D. degree in Geology on his thesis entitled '*Palaeobotanical and stratigraphical contributions to the Lower Gondwana formations of the South Rewa Gondwana Basin, Madhya Pradesh, India*'. For his thesis he was also awarded Chandra Dutt Pant Memorial Gold Medal for being the best Research Scholar. He served BSIP in various capacities and superannuated from the Institute in December 2004. During his scientific career he also worked as the Museum Curator for a period of 5 years (July 1971 to August 1976).

He was an established geologist, palaeobotanist and diatom researcher. His studies on the Late Cenozoic sediments of Nancowry and Kamorta islands resulted in the recovery of rich diatom and silicoflagellate assemblages and in the recognition of four Neogene Tropical Diatom zones. He also recorded rich assemblages of diatoms and silicoflagellates, for the first time, from Anderson and Interview islands. Diatoms and silicoflagellates were also recorded by him from the Passa Bridge, Sawai Bay and Kakana sections of Car Nicobar Island and from the Havelock and Neill islands. The acritarch genus *Foveofusa*, published by him from the Umaria Marine Beds, is now considered an important element of NPPs. He published a large number of papers on the floral studies of Lower Gondwana. He carried out palynofloral studies (spores-pollen, fungi and dinoflagellate cysts) on the grab

samples collected by *R.V. Gaveshani* and Late Quaternary core samples collected by *R.V. Oceanographer*. Besides, he also studied palynofloral assemblage recorded from samples of DSDP Leg 22, Site 218. He also published several popular scientific articles in English and Hindi.

Apart from his wide research experience, he had field experience in various areas of India, viz. Madhya Pradesh (South Rewa Basin), Uttar Pradesh (Mirzapur), Arunachal Pradesh, Meghalaya and Assam, Himachal Pradesh, Odisha, Sikkim and several islands of Andaman and Nicobar Islands. He was widely travelled in connection to his research and other scientific activities, e.g. presentation of his work at international conferences, Inter-Academy Exchange of Scientists Programme, etc. Some of the countries visited by him are Australia, Germany, Japan, Norway and U.S.A. Besides, he undertook field work around Bergen (Norway) and participated in a Scientific Cruise aboard *R/S Hakon Mosby* in the Greenland-Iceland-Norwegian seas during his stay in Norway. He also carried out field work in Danish-Nienhof, north of Kiel (Germany), Ipswich Coal Measures, Queensland (Australia) and Monterey, California (U.S.A.).

Late Dr. Anil Chandra was a member of the International Society of Diatom Research, U.K. since 1986 and Fellow of the Palaeobotanical Society and the Palaeontological Society of India. He served as a Member of the Executive Council of the Palaeontological Society of India (for two terms) and President of the Palaeobotanical Society (2004-2006).

Besides being an excellent scientist, he was a thorough gentleman and was very popular among his friends and colleagues. His unassuming manners and affable nature won him the respect and recognition of all. Gone but never forgotten, he will be sorely missed. Generally, he was a man of few words but was extremely sincere and gentle. His demise is a massive blow to his friends, relatives and all those who knew him. It is, particularly, most shocking to his beloved wife Dr. Shaila Chandra, which no words can adequately express. His death robbed me of a lovable and sincere friend and the palaeobotanical world of one of its most ardent workers, leaving behind a gap never to be filled. Though, he is no more but will remain forever in our minds and hearts. While paying homage to his fond memory, I pray to Almighty to allow his pious soul rest in peace.

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**Hari Mohan Kapoor**  
01/08/1929 - 27/04/2021

Shri Hari Mohan Kapoor, an eminent Indian palaeontologist, breathed his last in the morning of 27<sup>th</sup> April, 2021 at the age of about 90 years. He received post graduated degree in geology from University of Lucknow in 1954 and joined Geological Survey of India (GSI). He had a distinguished career in G.S.I. serving the premier geological organization of the country at Jammu-Srinagar, Lucknow and Kolkata for almost 35 years. Shri Kapoor took over the charge of Palaeontology & Stratigraphy Division, GSI at Kolkata in January, 1981 and superannuated on 31/08/1989 as the Director, Palaeontology Laboratory, Northern Region in Lucknow.

His contributions to the palaeontology and biostratigraphy of the Palaeozoic-Mesozoic sequences of Kashmir valley, mainly to the Guryul Ravine section are of immense value and form the base for subsequent biostratigraphic studies of Kashmir geology and Indian Triassic successions. He guided a large number of GSI geoscientists in Kashmir valley during several orientation courses of GSI training Institute. Shri Kapoor was a leader/member of several of the projects of the International Geological Correlation Programme (IGCP). He served the Executive Council of the Palaeontological Society of India for several decades and meticulously guided in smooth functioning of the Society's affairs. Shri Kapoor was a dedicated scientist, erudite, soft spoken and always helpful.

He is survived by his two daughters and a large number of friends.

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**M.S. Mannikeri**  
(23/10/1940 – 23/03/2021)

We record with deep sorrow the demise of Dr. M.S. Mannikeri, Former Professor, Department of Geology, Karnataka University, Dharwad on 23<sup>rd</sup> March, 2021 after a brief illness. With his death we have lost a great teacher. Dr. Mannikeri was born on 23.10.1940 in Mamadapur village near Gokak of Belguam District. He did B.Sc. at Karnataka Science College and M.Sc. Geology at Karnataka University, Dharwad. Later he joined as a Lecturer in the year 1965 in Karnataka University. During early 1970, he was deputed to Panjab University, Chandigarh to do Ph.D. under the able guidance of a well-known palaeontologist, Prof. S.B. Bhatia. After returning from Chandigarh, he was actively involved in teaching and research and subsequently he became Reader and Professor. Dr. Mannikeri has successfully guided three M.Phil. and two Ph.D. students. He participated in several seminars/conferences, and has published more than twenty five research papers in refereed journals. He has also written a book in Kannada '*Jeevavasheshagalu*' related to palaeontology. Most of his research work pertains to micropalaeontology and was widely recognized as a well-known palaeontologist in the geological community. Apart from teaching and research activities, Dr. Mannikeri served the Karnataka University in various capacities. He was Chairman of the Department, Academic Council Member, Faculty of Science Dean and University Printing Press Director. He was the President of the Dharwad District Science Academy for a period of three years. Dr. Mannikeri will be remembered fondly by colleagues for his affectionate and friendly behavior, which in fact, kept harmony not only in the department but entire geology community. His popularity amongst students is worth mentioning. In his personal life he was very meticulous and well disciplined.

Dr. Mannikeri's death is an immense loss not only to his family, his friend and our department, but also to the entire teaching community of the Karnataka University. He is survived by his two sons and two daughters. The teaching staff, non-teaching staff, research scholars and students of the department pay their deep respects to Dr. Mannikeri and pray almighty to bestow peace to the departed soul.

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**Ramesh Moreshwar Badve**  
(26/02/1937 – 26/01/2021)

Late Dr. Ramesh Moreshwar Badve, a pioneer and versatile palaeontologist, micropalaeontologist and stratigrapher of India was born on 26<sup>th</sup> February 1937 at Ahemdnagar of Maharashtra. After leading a purposeful life he left for his heavenly abode on 26<sup>th</sup> January 2021 at Pune, Maharashtra.

Although he lost his father very early in his life yet he pursued his education very sincerely. He had early education at his native place. In 1957 he joined Fergusson College, Pune and obtained B.Sc. degree. Dr. Badve received M.Sc. in geology from University of Pune in 1961. In 1966 he joined newly established research Department devoted to palaeontology in 'Maharashtra Association for the Cultivation of Science' (MACS), Pune (now renamed as Agharkar Research Institute, Pune) as a research scholar. He was awarded Ph. D. degree of Pune University for the thesis '*Stratigraphy and Palaeontology of the Bagh Beds*' in 1972 under the guidance of Prof. Chiplonkar. In 1975, Dr. Badve joined MACS as a staff member of Geology and Palaeontology Department of MACS.

His academic contributions are very significant. His work on the Bagh trace fossils was pioneering in the Indian context; followed by extensive studies of ichnofaunas from Kachchh, Gujarat and adjoining areas. Dr. Badve initially gave emphasis on the revision of mega invertebrates however, to impart wider visibility to the Department, he initiated research on calcareous algae, palaeopalynology and bryozoa to develop expertise in these microfossil groups. Dr. Badve immensely contributed on ichnofossils; megafossil groups such as bivalves, gastropods, echinoids, cephalopods,

etc and microfossil groups like calcareous algae, bryozoa, pollen and spores, etc. from Indian sedimentary sequences of different ages. Under Academic Exchange program of Indian National Science Academy (INSA), New Delhi and Royal Society, London, Dr. Badve visited the Natural History Museum, London in 1991 and conducted research on bryozoa. Six students including me were awarded Ph. D. from Pune University under his guidance.

He was instrumental in organizing the 'X Indian Colloquium on Micropalaeontology and Stratigraphy' at Pune in 1982 and jointly edited Colloquium volume containing 50 peer reviewed research papers. Dr. Badve was a life member of the Geological Society of India, Bangalore; the Gondwana Geological Society, Nagpur; the Paleontological Society of India, Lucknow; the Maharashtra Academy of Sciences, Pune and Marathi Vidnyan Parishad Pune. Dr. Badve worked on various academic bodies of the Pune University and also served as contributory teacher in the Department of Geology, Pune University.

After superannuation, Dr. Badve was actively engaged in geological consultations offering services in mineral investigation, engineering geology, geohydrology, etc. and making significant contributions on the Holocene bryozoans from the West Coast of our country. Late Dr Badve is survived by his wife, a son and a daughter.

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## Annual Report of the Palaeontological Society of India for 2020-2021

Following activities of the Society have taken place since the publication of the Annual Report for the year 2019-2020 in Journal of the Palaeontological Society of India, Vol. 65 (1), June 2020.

### Annual General Meeting

The 64<sup>th</sup> Annual General Meeting of the Palaeontological Society of India (PSI) was held (virtual, online) under the chairmanship of Prof. M. P. Singh, President of the Society on 20<sup>th</sup> October, 2020 at 3.00 p.m. 52 members attended the meeting. Minutes of the last Annual General Meeting were confirmed.

### Executive Council 2020-2022

Result of the election for the Executive Council of the Society for the years 2020-2022 was announced.

New office bearers to the Executive Council of the Society for the years 2020-2022:

President: Prof. M. P. Singh, Lucknow; Vice-Presidents:

(i) Dr Sudhir Shukla, Lucknow, (ii) Prof. S. M. Hussain, Chennai; Treasurer: Dr. Purnima Srivastava, Lucknow; Secretary: Dr. V. P. Mishra, Lucknow; Jt. Secretaries: (i) Dr. A. K. Arya, Lucknow, (ii) Dr. Rajeev Saraswat, Goa; Executive Council Members: (i) Prof. A. D. Singh, Varanasi, (ii) Prof. Rajeev Patnaik, Chandigarh, (iii) Dr. P. N. Kapoor, Dehradun, (iv) Dr. Varun Parmar, Jammu, (v) Dr. Ajoy Bhaumik, Dhanbad, (vi) Dr. Kapesa Lokho, Dehradun, (vii) Dr. Anju Saxena, Lucknow, (viii) Dr. Rajani Panchang, Pune & (ix) Dr. Ashutosh Kumar Singh, Delhi.

### Awards & Medals

#### 1. Prof. R. C. Misra Lifetime Achievement Award & Medal

Prof. Shailesh Nayak was selected for the Prof. R. C. Misra Lifetime Achievement Award and Medal of the Society for the year 2020.

#### 2. Prof. S. N. Bhalla Commemorative Gold Medal

Prof. G. V. R. Prasad, Delhi University was selected for the award of Dr. S. N. Bhalla Commemorative Gold Medal & award for 2021.

#### 3. Prof. S. K. Singh Memorial Gold medal

Dr. Hukam Singh, Scientist, BSIP, Lucknow, the corresponding author of the paper entitled 'An early Eocene floral assemblage from the Cambay Shale (Tarkeshwar Lignite Mine) Formation, Gujarat: palaeoclimatic and phytogeographical implications' was selected for the award of the medal for 2019 (best research article published in Journal P.S.I., vol. 64, 2019).

Dr. Poonam Chahal, Scientist, WIHG, Dehradun and corresponding author of the paper entitled, 'Apreliminary assessment of the geological evidence of the mega floods in the Upper Zanskar Catchment, NW Himalaya' by Poonam Chahal, Anil Kumar, Pankaj C. Sharma, Y. P. Sundriyal and Pradeep Srivastava was selected for the award of the Prof. S. K. Singh Memorial Gold Medal for 2020 (best research article published in Journal P.S.I., vol. 65, 2020).

#### 4. Mani Shanker Shukla Gold medal

Dr. Samaya S. Humane (Nagpur University) and Dr. Biswajit Thakur (B.S.I.P., Lucknow) were selected for the award of the medal for 2019 for their outstanding contributions on Indian material in the field of micropalaeontology.

### Lectures

1. **22<sup>nd</sup> Prof. S. N. Singh Memorial Lecture** was delivered (online) by Dr. V. M. Tiwari, Director, N.G.R.I., Hyderabad on 5<sup>th</sup> October, 2020. The topic of lecture was "Linking Subduction Zone earthquakes size distribution with Lithospheric geometry".
2. **38<sup>th</sup> M. R. Sahni Memorial Lecture** was delivered (online) by Prof. A. D. Singh, CAS in Geology, B.H.U., Varanasi on 20<sup>th</sup> October, 2020. The topic of the lecture was "Understanding seasonal monsoon dynamics through past changes in water-column structure in the northern Indian Ocean".

### International Fossil Day (IFD) 2020

International Fossil Day (IFD) 2020 was celebrated (online) at following centres in association of the Palaeontological Society of India by arranging lectures / webinars / Quiz programmes on palaeontological themes which were well attended:

- i) **Pune-Mumbai Students' Chapter**, Savitribai Phule Pune University, Pune. Lectures were delivered from 12<sup>th</sup> to 16<sup>th</sup> October, 2020 by Dr. Som Shah, Dr. Kantimati Kulkarni, Dr. Rajiv Nigam, Dr. S.M. Hussain & Dr. Jyoti Srivastava. A Quiz competition was also arranged on 17<sup>th</sup> Oct., 2020.
- ii) **Nagpur Students' Chapter**, PG Department of Geology, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur. Lectures were delivered from 11<sup>th</sup> to 15<sup>th</sup> October, 2020 by Dr. Omkar Verma, Prof. Thierry Adatte, Prof. S. M. Hussain, Dr. Peter Gell & Dr. Sudhir Shukla.
- iii) **Southern Students' Chapter (Chennai)**, Dept. of Geology, University of Madras organised lectures of Dr. R. Nagendra & Shri S. Anantharaman on 16<sup>th</sup> October, 2020.
- iv) **Dr. Harisingh Gour Vishwavidyalaya, Sagar** organised lectures of Prof. Ashok Sahni, Prof. P. O. Alexander & Prof. P. K. Kathal, Prof. A. D. Singh and Dr. Y. Raghummni Singh and also 3 research scholars on 17<sup>th</sup> October, 2020.
- v) **Dept. Of Earth Science, IIT, Bhubaneshwar** organised lectures on 21<sup>st</sup> October, 2020.

Several other geoscience centres in India also celebrated International Fossil Day 2020 by organising well attended online lectures which indicates immense popularity of the fossil studies in the country.

### EC Meetings

Executive Council met 4 times (3 times virtually and once in the Geology Department. In Lucknow University) during the period.



**New Members**

12 Life and 2 annual members joined the Society.

**Publication**

The Society publishes SCI Journal of the Palaeontological Society of India biannually beside publishing special volumes and field guide books as and when required. I am happy to add that the credibility of the journal has increased and presently its impact factor is 0.663. The Society is very much thankful to the Editorial Board of the Journal for their untiring efforts in this direction. Two nos. of Volume 65 of the Journal were published and released during the year 2020.

**Acknowledgements**

The Society expresses its deep sense of gratitude to the Department of Science & Technology, Govt. of India for granting Rs. 1,50,000.00 towards publication of the Journal of the Society. The Convenors/Co-ordinators of the Student Chapters who organised the International Fossil Day at their centres on behalf of the Society are also thankfully acknowledged.

The Society is grateful to Prof. Ajai Mishra, Head, Centre of Advanced Study in Geology, Lucknow University and all the faculty members, staff and students for their help and support in all the activities of the Society.

The Society feels obliged to all scientists who assisted editors in evaluating scientific contributions received for publication in the Journal of the Society.

Lastly, I would also like to thank the members of the Executive Council of the Society and fellows for their help, support and guidance in the smooth functioning of the activities of the Society.

15<sup>th</sup> April, 2021.

Dr. V. P. Mishra  
Secretary

The Palaeontological Society of India  
CAS in Geology, University of Lucknow, Lucknow

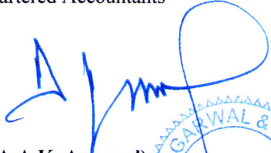
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**THE PALAEOLOGICAL SOCIETY OF INDIA, LUCKNOW**  
(Registered under Societies Act, U.P. Govt.)  
**STATEMENT OF RECEIPT AND PAYMENTS**  
(From 1st April 2019 To 31st March 2020)

RECEIPTS	AMOUNT (Rs.)	PAYMENTS	AMOUNT (Rs.)
<b>Opening Balances:</b>			
F.D.R	2110520.00	Honorarium to Part-Time Worker	99600.00
IOB (1867)	39439.14	Professional Fees	17400.00
Cash in hand	2675.18	Printing & Stationery Expenses	3345.00
	<b>2152634.32</b>	Postage Expenses	22717.50
		Telephone & Internet Expenses	10958.00
Admission & Subscription Fees	39400.00	Publication Expenses	406196.00
Sale of Society's Publications	219185.00	Miscellaneous Expenses	2690.00
Interest on S/B A/C	4041.00	TDS on Interest on FDR	27135.00
Interest on FDR	135675.00	O.N.G.C. Dehradun (TDS Deducted)	15000.00
DST Grant (SERB)	150000.00	Oil India Ltd. Noida (TDS Deducted)	2000.00
Income Tax Return	690.00	S.N.Singh Memorial Lecture Expenses	6441.00
For Dr. Rajiv Nigam Gold Medal	200000.00	Website Maintenance Expenses	10500.00
O.N.G.C. Dehradun (Workshop Grant)	150000.00	Conveyance Charges	1850.00
MOES, N. Delhi (Workshop Grant)	250000.00	Bank Charges	112.10
Oil India Ltd. Noida (Workshop Grant)	100000.00	Fossil Day Expenses	1120.00
		Annual Membership FIGA	20000.00
		Travelling Exp against meeting at FIGA	17296.00
		Workshop Expenses	382173.90
		<b>Closing Balances:</b>	
		Cash in hand	18795.78
		I.O.B.(1867)	214852.04
		F.D.R.	2121443.00
			<b>2355090.82</b>
	<b>3401625.32</b>		<b>3401625.32</b>


As per our report in form 10B of even date  
For Amit Agarwal & Co.

Chartered Accountants

  
(CA A.K. Agarwal)  
Partner  
Place: Lucknow  
Date: 20.07.2020



For The Palaeontological Society of India



(Dr. Purnima Srivastava)  
Treasurer

**Treasurer**  
**The Palaeontological**  
**Society of India**



(Dr. V.P. Mishra)  
Secretary

**Secretary**  
**Palaeontological Society of India**  
**Geology Department, Lucknow**  
**University, Lucknow-226607**  
**(INDIA)**

**Medals and Awards Instituted by the Palaeontological Society of India**

**NOTICE**

The Palaeontological Society of India awards the following Gold Medals/Awards instituted by benevolent grants/funds received through the families and friends of the Fellows of the Society. These Medals and Awards are given away each year except the Prof. S.N. Bhalla Gold Medal which is awarded once in two years. Applications and Nominations for the award and Medals are invited up to 31<sup>st</sup> January 2022.

1. Sharda Chandra Gold Medal for outstanding research publications on Indian material in the field of palaeontology.
2. Mani Shanker Shukla Gold Medal to a young research worker (below 40 years of age) in recognition of his outstanding contributions on Indian material in the field of micropalaeontology.
3. Prof. M. R. Sahni Gold Medal for a post graduate Student of University of Lucknow securing highest percentage of marks in the examination in Palaeontology Paper.
4. Prof. S. N. Bhalla Gold Medal for outstanding contributions in the field of micropalaeontology.
5. Prof. S. K. Singh Memorial Gold Medal for best research paper published in the immediate past volume of the Journal of the Palaeontological Society of India.
6. Prof. R. C. Misra Life Time Achievement Award Gold Medal for outstanding contributions in the field of geosciences.

For details visit our website [www.palaeontologicalsociety.in](http://www.palaeontologicalsociety.in)

Statement about ownership and other particulars about newspaper 'Journal of the Palaeontological Society of India' to be published in the first issue every year after last day of February.

**FORM V RULE (8)**

1. Place of Publication: Lucknow. 2. Periodicity of Publication: Biannually. 3. Printer's Name, Nationality, Address: C. M. Bajaj, Indian, Army Printing Press, 33, Nehru Road, Sadar Bazaar, Cantonment, Lucknow-226002, Uttar Pradesh. 4. Publisher's Name, Nationality, Address: The Palaeontological Society of India, Department of Geology, Centre of Advanced Study, University of Lucknow-226007, Uttar Pradesh. 5. Editor's Name, Nationality, Address: Mukund Sharma, Indian, Department of Geology, Centre of Advanced Study, University of Lucknow-226007, Uttar Pradesh. 6. Name and Address of Individuals who own the newspaper and partners or shareholding more than one percent of the total capital: The Palaeontological Society of India, Department of Geology, Centre of Advanced Study, University of Lucknow-226007, Uttar Pradesh.

I, Mukund Sharma, hereby declare that the particulars given above are true to the best of my knowledge and belief.

Dated: 01 June, 2021

(Sd.) Mukund Sharma  
Editor, Journal of the Palaeontological Society of India