

Satyendra Nath Bhalla (1940-2021)

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 10th 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 Punjab 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 Micropaleontology 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 offshore 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 'micropaleontology movement' in India, i.e. the Indian Colloquium on Micropaleontology 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, Lucknowfelicitated him for his significant contributions to Micropaleontology 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 'Micropaleontology & its Applications' was published in 2017 by his research students as a mark of respect to his contributions to micropaleontology.

Prof. Bhalla retired from the Aligarh Muslim University in 2002 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 a modest 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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