

Obituary

Prof. Dr. K. S. Valdiya (India)



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Prof. Dr. KS Valdiya (Khadg Singh Valdiya), a renowned geo-scientist, academician, author, and an active environmentalist from India died on 29 September 2020 in the age of 80. He has contributed in wide aspect of Himalayan geology. He did specialization in tectonics with special reference to active faults and Environmental Geology of the Himalaya. His fundamental studies and research on the western Himalayas serve as a major understanding for interpreting the structure and tectonics of the Himalaya. His fundamental studies and prescient observations of both megascale and mesoscale structures in the Uttarakhand Himalaya underpins much of current understanding of the Himalayan tectonics and provides a template and a guide for interpreting the structural architecture of the entire Himalaya. He demonstrated the buckling, breaking and splitting of the Himalayan crust along

what he recognized and demonstrated as the terrane-defining faults and thrusts of regional dimension, resulting in uplift and southward displacement of split blocks. This has influenced virtually every attempt by other geologists to reconstruct shortening of the Himalayan thrust front. Prof. Valdiya provided highly original scientific insights into quintessential continental collision on the basis of his study of the dome-shaped crustal upwarps in the immediate proximity of the zone of collision of India with Asia. Prof. Valdiya is the first Indian to do extensive mapping and comprehensive studies of active faults and related landform development and landscape reshaping in part of Uttarakhand, southeastern Karnataka and in Kanara–Malabar coastal belt in southern India. Related to understanding of limitation of rupture zone in the generation of earthquakes, these studies provide illuminating insights into deflection, deviation, disruption and ponding or blockages of rivers in response to renewal of movements on active faults. The findings have considerable bearing on evolving a strategy for hazard management.

Prof. Valdiya was born in a small hill town Kalaw of Myanmar on 20 March 1937. In 1947, his family returned to their hometown in Pithoragarh (border city to Nepal in west) in the Indian state of Uttarakhand. He got master's degree from Lucknow University, India in 1955 and he did PhD in 1959 from same university. He started teaching career from Lucknow University in 1957. He worked in Wadia Institute of Himalayan Geology, Deharadun, India till 1976. He started to serve Kumaun University as professor of geology, and he had established Department of Geology in the university. He has also served as a Member of the Science Advisory Committee to the Cabinet of the Prime Minister of India (1983–1988), influencing national policy on Science and Environment. He has written over 110 research papers, authored 14 books, edited 9 books and penned 40 articles in Hindi towards popularization of science. *Geology of Kumaon Lesser Himalaya* (1980), *Aspects of Tectonics: Focus on South-central Asia* (1984), *Environmental Geology: Indian Context* (1987), *Dynamic Himalaya* (1998), *Saraswati, the River That Disappeared* (2002), *Geology, Environment and Society* (2005), *The Making of India: Geodynamic Evolution* (2010), and *Ek Thi Nadi Saraswati* (2010) were his major contributions as books. In 2007, he was awarded the Padmashri for Science his outstanding contribution to Science by the President of India. In 2015, President of India awarded Padma Bhushan to Prof. Valdiya.

Prof. Dr. Valdiya is a Fellow of the Indian National Science Academy, the Indian Academy of Sciences, the National Academy of Sciences, India, Third World Academy of Sciences, and Geological Society of India. He is an Honorary Fellow of the Geological Society of America and the Nepal Geological Society. He has served as a Council Member in INSA (1984–1986).

Unfortunately, he was facing few health problems in his elder age but he was active in his 80s also. As a result of his active personality and the support of his wife and a son, he was busy to pursue his professional activities. He had an extremely logical mind and he is fully devoted modest militant in favor of geo-scientific research and environmental protection in the Himalaya. In the recent years, he was living in Bangalore, Karnataka, India. In the age of 80 also, he was supporting “Science Outreach Program” and he was supporting marginal students of Uttarakhand State of India. We will miss him in every movement of Himalayan geological research. His presence will be continued to surround Himalayan geological researchers. Due to his contributions for the Himalayan geological research, he will live in hearts and mind of all the researchers of Himalayan geology for many years.

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