

Life and Legacy of D.N. Wadia

Rasoul Sorkhabi

IN 1969, fifty years ago, D.N. Wadia, an eminent Himalayan geologist and the father of geology in independent India, died. His death marked the end of an era, but his life is still an inspiring story for the younger generations in India.

In 1980 I happened to see the Kashmir Himalaya from the Pahalgam Valley and fell in love with the mountains. I wanted to be close to the Himalayas and study geology. I soon learned that the University of Jammu had a geology programme and that it was founded by a renowned geologist, D.N. Wadia. His name gave a reputation to Jammu; it still does.

In 2014, the University of Jammu opened the Wadia Museum of Natural History to the public. Undergraduate geology in Jammu is offered at the Government Gandhi Memorial Science College, formerly called the Prince of Wales College built by Maharaja Pratap Singh in 1905 on the occasion of a visit made by Prince of Wales (later King George V) to that city.

In 1907 Wadia, aged 24, was hired by the college as professor of natural science at a salary of ₹ 200. He then established a geology department in the college which still stands today on the same campus. Since there was no suitable textbook on Indian geology for students, Wadia decided to create one.

His *Geology of India*, first published in 1919, became so popular that it went through several editions and reprints. Just a few months before his death, Wadia completed the fourth edition of his 500-plus page textbook published posthumously in 1975. This book has trained generations of geologists in India and is still informative and useful.

An Indian Parsi

Darashaw Noshervan Wadia was born on 23 October 1883 in the port town of Surat in Gujarat. He came from an educated Parsi family. His father was a station master in the Bombay, Baroda and Central Indian Railway (today called the Western Railway). In 1894, his family moved to Baroda where the teenager Wadia completed high school and entered Baroda College.



A portrait of D.N. Wadia painted by Setsuko Yoshida, donated by Rasoul Sorkhabi to the Wadia Museum of Natural History in Jammu University

Aside from his elder brother, Munchershaw Wadia (an educationist in Baroda), two teachers had great impact on Wadia's education: Adarji Meernosji Masani, the college's principal and professor of natural history; and the Cambridge-educated Aravind Ghosh who later rose to be an eminent Hindu Yogi and philosopher under the name of Sri Aurobindo.

Masani founded a museum of arts and sciences at the college. This museum greatly helped Wadia to study geology because in those days geology was only offered in Calcutta (Kolkata) and Madras (Chennai). Ghosh inspired Wadia's love for English literature (especially Shakespeare) and influenced his elegant style of prose which is so apparent in Wadia's papers and reports.

Wadia obtained two B.Sc. degrees in 1903 and 1905 and an M.A. in geology in 1906 from Baroda College, and a year later joined the Prince of Wales College. During his fourteen years at Jammu, Wadia spent many vacations in the Himalayas and excelled in geological fieldwork. He also became a close friend of Charles Middlemiss who had worked for the Geological Survey of India in Calcutta for thirty-four years, and having retired in 1917 he was hired by the Maharaja of Kashmir and Jammu as the superintendent of mineral survey in that state.



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William D. West,
the last British director of the
Geological Survey of India



A Pioneering Geologist

The span of Wadia's life included both British India and Independent India. In British India he became a star of Himalayan geology on par with the greatest British geologists of his time such as Charles Middlemiss, John Auden, and William West. Indeed, in 1921, Wadia joined the Geological Survey in Calcutta, being the first Indian employee who had his degree from an Indian university. His geologic maps and reports of the remote and arduous terrains in Nanga Parbat, Hazara, Gilgit, Kashmir and the Punjab are still valid and valuable.

Wadia's first wife (married in 1909) died in northern Kashmir in 1935 while he was on a fieldtrip; her tomb lies in Srinagar.

William D. West, the last British director of the Geological Survey of India, once remarked that "wherever Wadia traveled in the Himalaya he was successful in throwing significant light on problems of stratigraphy and tectonics which had hitherto remained uninvestigated or unexplained."

In 1938, Wadia, aged 55, retired from the Survey. Although he had won the highest scientific awards in Britain – the Back Award of the Royal Geographical Society in 1934 and the Lyell Medal of the Geological Society in 1935 – his retirement at the rank of assistant superintendent (the same rank he had been hired seventeen years before) was unfair and unpleasant.

Soon after his retirement, Wadia moved to Colombo and worked as chief mineralogist for the government of Ceylon. In 1940 he married his second wife Meher G. Medivala, a mineral economist and graduate of the University of Bombay, who remained Wadia's companion for the rest of his life. (Meher Wadia published *Minerals of India* in 1966.)

During his stay in Ceylon, Wadia performed the same excellent job as in India. His contributions were significant and unselfish. In 1942 it was reported to the police in Namunukala, southern Sri Lanka, that a "lonely khaki-clad figure was silently hitting every stone in the neighborhood." It was, of course, the geologist Wadia doing fieldwork and mapping the mountain.

A Science Builder

In 1945, Wadia returned to India to serve as geological advisor for the government of independent India under India's first Prime Minister Pandit Jawaharlal Nehru. He designed a mineral policy for India and envisioned that geology would play a critical role in the economic and scientific development of India. Although Wadia continued to publish papers, his main role in independent India was that of a science builder.

He helped establish or presided over a large number of geoscientific institutes, professional societies, and academic journals. The list is too long to be described here. A few examples will suffice: Indian Bureau of Mines in Delhi, Geological Society of India in Bangalore, National Geophysical Research Institute in Hyderabad, National Institute of Oceanography in Goa, and Wadia Institute of Himalayan Geology in Dehra Dun (later named after him). From 1949 until his death, Wadia served as the head of the Atomic Minerals Division of the Indian Atomic Mineral Commission.

Wadia did not graduate as a PhD but his research work surpassed many PhD dissertations. He was awarded honorary doctorates from the universities of Delhi and Aligarh. In 1958 Wadia was given the Padma Bhushan – the third highest civilian award by the government of India. In 1962 he was named National Professor in India.

In 1964 Wadia hosted and presided over the twenty-second International Geological Congress in Delhi – the first ever to be held in Asia. This was a story of success and encouragement for India in its post-independent years. The thirty-sixth international geological congress will be held in New Delhi in March 2020 – something that Wadia would have appreciated and enjoyed to attend.

Wadia died on 15 June 1969 in New Delhi while still tirelessly working. He witnessed both World War I and II. His life was not easy but he took every challenge as an opportunity to excel in his work and as service to science and society. His publications number close to ninety. He was a native (*swadeshi*) Indian scientist but with an open mind to the outside world.

Wadia's friends have described him as quiet, polite, intelligent, well-read, hardworking, disciplined, and self-made. No doubt, Wadia possessed noble qualities that helped him in life but his success story also testifies to the fact that when individuals irrespective of their race, class and creed are given opportunities and respect, they become highly creative.

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