

Krishna Kumar Mathur (1893-1936)

Few among the present day geologists have heard the name of Prof. Krishna Kumar Mathur (1893-1936), who was the first professor of geology at the newly started Banaras Hindu University in 1921. The last decade of the nineteenth century saw the birth of many illustrious persons who have made history in all walks of life. Mathur's contemporaries were Prof. Shanti Swarup Bhatnagar, Prof. Birbal Sahni and Prof. Megh Nad Saha, all of whom were born at about the same time, became famous through their scientific work and were elected as Fellows of the Royal Society.

Early Life

Krishna Kumar Mathur was born at Kanpur in Uttar Pradesh on July 30, 1893. His father was a government employee at the local treasury who had settled at *Vrindavan* after retirement. He had six children of whom Krishna Kumar was the third. Krishna Kumar



Mathur's schooling was initially at Kanpur and Pilibhit. He later moved to Agra for higher studies and in 1915 obtained the Bachelor of Science degree from the Allahabad University. The only opening for bright students those days was joining the Indian Civil Service but Krishna Kumar did not toe this line and with the help of a scholarship from the State Government he proceeded to London for higher studies. It was war time and he had to face the rigours of travel in those turbulent times. He enrolled himself as a student of the Royal School of Mines of the Imperial College, London, in 1916 and secured the BSc. degree in Mining Engineering with first class Honours and the Associateship of the Royal School of Mines (ARSM) in 1919, standing first in Mining Geology.

With such qualifications Mathur had hoped to get a footing in the Geological Survey of India but was not selected at an interview held in London.

Professor at the Banaras Hindu University

In the meanwhile a famous educational institute of higher education, the Banaras Hindu University (BHU) had come into existence through the dedicated efforts of Pandit Madan Mohan Malaviya at Varanasi on the banks of the Ganga. Varanasi has remained through the ages as a great centre of learning. Originally started as a private institution with money collected from the Princes of India, the university was inaugurated on 8th February 1916 at an impressive ceremony. Ever since, this day, *Vasanth Panchami*, is celebrated with great solemnity every year.

Hopes were entertained that the new university would become a better type of university with its main objectives of promoting the study of Hindu scriptures and ancient classics in Sanskrit language as a means of preserving and popularising the best thoughts and culture of ancient India. The promotion of learning and research in all branches of arts and science, and the acquisition of technical knowledge for the development of the natural resources of the country were the other main objectives. Building of character and inculcation of national spirit in the youth of the country were the principal concerns of the new university.

A composite department of Geology, Mining and Metallurgy came into existence at the new university in 1921. The position of first professor of geology was offered to K.K. Mathur, which he readily accepted and from 1921 onwards up to his premature death in 1936 he functioned as a university professor, a real *Açarya* or *Guru*. He was an excellent teacher of geology and was held in great esteem by his pupils.

A Great Teacher

I recall, when I entered the college at Bangalore as a student of geology, in 1932, my teacher was P.R. Jagapathy Naidu, who was a student of Professor Mathur. Jagapathy Naidu himself was a good teacher who had specialized in Applied Mineralogy and Petrology. His style of teaching presumably was copied from that of his Professor Krishna Kumar Mathur. Incidentally Jagapathy Naidu was a thorough nationalist, aptitudes acquired during his stay at Banaras Hindu University under the tutelage of Prof. Mathur. Many outstanding personalities, including Pandit Madan Mohan Malaviya and Sarvapalli Radhakrishnan, functioned as Vice Chancellors of the Institution giving it a reputation denied to other similar institutions in the country.

Prof. Mathur outshone in this atmosphere of liberal education, pursuing a policy of extensive training in the subject in order to produce competent geologists. Training was imparted in methods of prospecting, mining and dressing of ores and their metallurgical treatment; an independent theory paper along with a course of connected field work was devoted to surveying; practicals comprised, inter alia of analysis of minerals and rocks and preparation of thin sections. For training students in writing reports and initiating them into research work, thesis was introduced in addition to theory and practical courses for the first time in an Indian university. Because of the introduction of such wholesome practices, students of geology emerging from BHU were better trained to take up positions of responsibility in their selected fields.

The atmosphere he created for higher education in geology was so good that it attracted

students from all parts of India. The compliments paid by Dr. West in his report on 'The Training of Indian Geologists' is worth quoting:

'... I should like to emphasize, which I think will be universally admitted that the success of any department of learning depends to a large extent upon the personality of the head of that department. If he is a man of high character, of vision and enthusiasm, then he will attract the best students and the best staff and his department will become known throughout the country. Such men have become and still are found in our Indian universities and so far as geology is concerned I would refer to the example of the Late Prof. K.K. Mathur who did so much within the means at his disposal to make the geology department of Banaras Hindu University a success.'

Although nearly seventy years have rolled by since the time of Prof. Mathur, the traditions built by him have survived. I recently had the privilege of visiting Varanasi and go round the spacious halls and corridors of the geology department and interact with some of the professors and students. The entire premises were kept neat and tidy. All instruments were operational and none were under cover. Attenders were polite. I was agreeably surprised to find a special wing in the department earmarked for the study of coal.

While Professor Mathur had specialized in mineralogy and petrology, this, however, had not prevented him from encouraging studies in other branches of geological science like palaeontology, economic geology and geochemistry. He laid special emphasis on field work and took his students (among whom were V.S. Dubey, N.L. Sharma, A.G. Jhingran, S.N. Wakhaloo, G.W. Chiplonkar and P.R.J.Naidu) to far off places like Girnar, Pavagad Hills and Kutch in Gujarat, coastal tract near Mumbai, Pir Panjal ranges in Kashmir, Salt range in the Himalaya (now in Pakistan) and Nepal.

Such a promising career as that of Prof. Mathur was cut short by a fell disease from which he did not recover in spite of best medical attention and he passed away in the early hours of 17th July, 1936, at Lucknow. The Department of Geology at Banaras Hindu University still cherishes his memory with undiminished fervour.

C.V. Raman, another great teacher who flourished at about the same time as Prof. Mathur, used to say that the principal function of the older generation of scientific men was to discover talent and genius in the younger generation and to provide ample opportunities for its free expression and expansion. This is what Raman did at the Bose Institute at Calcutta and the Indian Institute of Science and Raman Research Institute at Bangalore. He had an uncanny knack of discovering talent and the large number of scientists who are active today and holding the banner of science aloft are his discoveries. Prof. K.K. Mathur played a similar role in Varanasi. His example is worthy of emulation.

Banaras Hindu University, whose progress was uppermost in the mind of Prof Mathur, should strive to create and develop an environment of culture excelling in artistic, literary and scientific pursuits.

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