



Prafulla Chandra Ray

1861-1944

A pioneer in the field of pharmaceutical industry in India, P.C. Ray was the driving force behind the setting up of several industries, at a time when industrialisation had just begun in India. Driven by the urge to prevent foreign companies from making profits at the cost of Indian patients, he himself set up his own company to manufacture cheap drugs.

Prafulla Chandra Ray was born on 2 August 1861 in Raruli-Katipara, a village in the District of Khulna (now in Bangladesh). Prafulla Chandra was admitted to the prestigious Hare School in Calcutta in 1870. But a severe attack of dysentery forced him to leave the school for two long years. Throughout his later life he suffered from chronic indigestion and sleeplessness. But for Prafulla, the two years that that he was spared the tyranny of the dreary school routine were a blessing in disguise. He found time to satisfy his passion for the study of English and Bengali literature, a passion he had imbibed from his father. When he was barely ten years old, he had already learnt Latin and Greek and studied the histories of England, Rome and Spain.

After resuming his studies in 1874 at the Albert School, Prafulla passed the Entrance Examination in 1879 and joined the Metropolitan Institute (now called Vidyasagar College). Prafulla would also attend lectures by Alexander Pedlar on Chemistry in the Presidency College. And it was Pedlar's inspiring lectures that ultimately influenced Prafulla to take up Chemistry for his higher studies in B.A., although his first love was literature.

In 1882, Prafulla left for Britain on a 'Gilchrist Prize Scholarship' for higher studies. In 1887, at the age of 27 he was awarded the D.Sc. degree. Prafulla returned to India in 1888, but even with a D.Sc. degree, he could not find a job for himself. He spent almost a year working with his famous friend Jagadis Chandra

Bose in his laboratory. It was only a year later that Prafulla was appointed an Assistant Professor of Chemistry in the Presidency College at Calcutta.

His teaching skills very soon made him a favourite with his students. His lectures were marked by spicy humor and wit, and with the help of experiments and instances from everyday life he made his lectures not only interesting but also inspiring. He would put a pinch of ashes in his mouth to demonstrate that on burning bones retained no trace of their animal origins but became mere chemical compounds instead. In later years many of his students would admit that it was Ray's lectures that had inspired them to take to the sciences. Famous Indian scientists like Meghnad Saha and Shanti Swarup Bhatnagar were among his students.

Prafulla never tired of saying that the progress of India could be achieved only by industrialization. He believed that rather than pay money to foreign merchants for drugs, India should develop the wherewithal to manufacture its own drugs. And he decided to lead by setting an example himself. In spite of his meager salary he started preparing some chemicals at home. Soon his pioneering efforts bore fruit as his work expanded and he founded a company called 'The Bengal Chemical and Pharmaceutical Works'. Many graduates in chemistry joined his factory and worked hard for its improvement. Very soon, The Bengal Chemical and Pharmaceutical Works became a name to reckon with.

With his active cooperation, directly or indirectly, several textile mills, soap factories, sugar factories, chemical industries, ceramic factories and publishing houses were also set up. He was associated with establishments such as Bengal Potteries, Bengal Enamel Works, Calcutta Soap Works, National Tanneries and so on. With his inspiring dynamism Prafulla became the driving force behind the industrialization of the country that had begun during that time.

However, during all these years, Prafulla was also actively engaged in research in his laboratory at the Presidency College. His work on Mercurous Nitrite and its derivatives brought him recognition from all over the world. He continued publishing scientific papers and guiding doctoral students.

In 1916, Prafulla retired from the Presidency College but Asutosh Mukherjee, the Vice Chancellor of the University of Calcutta, appointed him as Professor of Chemistry at the newly set up University Science College. He remained associated with the institute for twenty years, finally retiring at the age of seventy-five. But even before his retirement, in 1921 he donated in advance his entire salary for the rest of his term to the department he headed. He also set up two annual research prizes in Chemistry -- one named after the great Indian chemist Nagarjuna and the second after Asutosh Mukherjee.

Prafulla also gave away his shares valued at a lakh of rupees in The Bengal Chemical and Pharmaceutical Works as an endowment. The profit from this endowment was used for the benefit of widows and orphans. He would also often share his accommodation with poverty-stricken students.

The life of this great Indian scientist, the most part of which was spent in selfless service, finally came to an end on 16 June 1944 in the same room that he had occupied for twenty-five years. ■

