

“Jagdish Chandra Bose: The first Modern Scientist”, by Dilip M. Salwi, Rupa & Co, New Delhi, 2002 (price not mentioned).

From Jawaharlal Nehru’s evocative “temples of modern India “ dedication to the grotesque jubilation following Pokahran II, science has always played an important role in the way independent India has defined itself: a nation which is trying to use that ultimate symbol of modernity to take, what it thinks is its rightful place among the “developed” nations. A nation recognized not for its snake charmers but for its intercontinental missiles. Even during the colonial times, science played an important role in defining nationhood. The era of “modern” science in India had a number of great scientists like C.V. Raman, P.C. Ray, M.N. Saha, S.N. Bose and J.C. Bose. The book under review is a short biographical sketch of J.C. Bose, a remarkable man, who also happened to live in remarkable times.

J.C. Bose belonging to a bhadralok Bengali family from East Bengal, started his career in England studying to be a physician. But this did not last long. He could not stand the dissection rooms and so decided to study Physics at Cambridge. He was lucky to have been taught by a galaxy of renowned physicists like Lord Rayleigh. Upon returning to India, he took up a job as a Professor at the Presidency College in Kolkatta. It was here that he started his path breaking work on the generation of radio waves.

Radio waves had been discovered by H. Hertz earlier in 1887. Using the rudimentary facilities available to him in Kolkatta, Bose fabricated a novel device to generate and detect radio waves, or more precisely microwaves. Though the credit (and fame, money and the Nobel Prize!) went to an Italian, Guglielmo Marconi, Bose had demonstrated his device earlier.

This discovery catapulted Bose to the highest echelons of science. A Doctor of Science from University of London followed and Bose was counted among the foremost scientists of his time. Subsequently, Bose gave up his research on radio and became fascinated by plants. He spent the later part of his career in trying to prove that plants (and inorganic materials like metals) “have feelings” and are conscious. Here Bose’s work was controversial and never really accepted by scientists. Here Bose’s work was controversial and never really accepted by scientists.

Bose was an important personality in the early times of Indian Science. Here was a native, in the heydays of colonialism, excelled in the classical western project of modern science. He was also actively involved in promoting science in India, both through institution building and though writing for the popular press on scientific issues. The biographical sketch by Dilip Salwi does not do justice to such a multifaceted personality.

The book is a straight forward rendering of major events in Bose’s life written in a somewhat annoyingly hagiographical style. For instance, though Bose’s work on the radio is deservedly given much prominence, his work on plant consciousness (which is now recognized as not quite up to the mark by all plant physiologists) is treated perfunctorily. As the historian Gyan Prakash points out, Bose devoted a large part of his mature scientific life in trying to show consciousness in plants in an effort to demonstrate the monism of Vedantic Hinduism. It would have been interesting to explore such contentious issues. Or even Bose’s relationship to the British and his scientific peers.

The author's style, reminds one of the older biographies of Great Indians by the Publications Division. The sentences in some places do not make sense and there are also several typographical errors, surprising in a book so short (60 small pages) and otherwise excellently produced. The best part of the book is the excellent photographs which are reproduced here. There is, in my opinion some confusion about who exactly the book is meant for. If it is for children, it is too drab. On the other hand, if it is meant as a genuine biography of J.C.Bose, it is woefully inadequate. And what does the subtitle "The first Modern Scientist" mean? The first modern Indian scientist? Or the first modern scientist in the world?

Writing about Indian Science and its practitioners is an admirable project. But these should be critical accounts of the scientists and their work. After all, even after more than two centuries of the modern scientific project in India, we have a long way to go. Whether it is the Rahu Kaalam or Godmen producing Seiko watches, we still have a long way to go before scientific culture becomes a way of life.