THE ULTIMATE FACTS - S.N. BOSE AND THE MISSED PHYSICS NOBEL PRIZE

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The Nobel Prize is one of the most prestigious awards in the scientific as well as general community. The documents, such as, nomination letters, expert's and the Nobel Committee's reports obtained from the Royal Swedish Academy of Sciences, Stockholm are analyzed to understand - why Satyendra Nath Bose, the founder of Bose- or Bose-Einstein Statistics, did not receive the Physics Nobel Prize.

Introduction

The Nobel Prize, named after the Swedish inventor and industrialist Alfred Nobel, is one of the most prestigious awards. According to the will of the founder, they are awarded to persons for their contributions in the fields of chemistry, physics, physiology and medicine, literature and peace. India stands in the list of “top-twenty” so far as the number of proposals either received from or sent by a nation is concerned.\(^1\) Documents related to selection of Nobel Prize awards were kept secret until 1974. It is only in 1974 that the Nobel Foundation decided to allow documents related to a prize open for public scrutiny which are older than fifty years. We find from the documents fifty years older that five Indian physicists and chemists were nominated for the Nobel Prize. Twenty Indians (10 chemists and 10 physicists) were asked by the Nobel Committees to send proposals. Their detail was explored in “Chemistry and Physics Nobel Prizes – India's Contribution”.\(^2\) The details of nomination for M.N. Saha and C.V. Raman are discussed on various articles published in different journals. However, before the publication of the book, S.N. Bose case was neither discussed by any other author including me. Only recently documents regarding S.N. Bose are available for research purposes only.

S.N. Bose is a great physicist; there exists a number of articles and biographies which deal with various aspects of S.N. Bose’s life.\(^3\) However, none of them deals with S.N. Bose and the Nobel Prize. Unfortunately the book “Chemistry and Physics Nobel Prizes – India’s Contribution” is not available in India. Thus I think it will be worth while to write this article for the readers of the “Science and Culture” to show:

(a) Who nominated S.N. Bose for the Physics Nobel Prize and for which achievements?

(b) The opinion of the Nobel Committee and its expert about S.N. Bose’s nomination.

Nomination for the Physics Nobel Prize

It is a well-known fact that Bose sent an article to Albert Einstein, in which he derived Planck’s law of radiation by applying Einstein’s concept of light quanta. Einstein realized the potential of the idea. He translated the article and got it published in “Zeitschrift für Physik.”\(^4\) This led to the foundation of the Bose-Einstein statistics. For this work, Bose in 1958, was elected as a Fellow of Royal Society London. According to his nomination certificate, Bose is:

“Discoverer of the Bose statistics. This idea was