## **Book Review**

## Journey into Light: Life and Science of C V Raman

## **G** Venkataraman

Indian Academy of Sciences, 1988 pp 570, Rs 285.61, ISBN 81-85324-00-X Viewed by S Sanatani, Vienna

I enjoyed so much reading this authentic and detailed biography of India's most famous scientist, that I felt inclined immediately to write a review of the book in order to attract the attention of other readers. The book appeared to coincide with the birth centennary of Raman and was thus a fitting tribute to a great man.

The author took infinite pains to produce, within the span of 20 months, a well-documented story of a prodigious genius. The main feature of this biography, is that it is a balanced account. It depicts the contemporary Indian scientific scene and highlights the contribution of Raman. The role of other stalwarts, as they enter and leave the story are also narrated. It is written in an attractive style with interesting anecdotes dispersed throughout the book. There are many black and white photographs which looked to me as collectors' valuable items. There is one of Raman with Heisenberg in Lindau on the shores of lake Constance. This is a place where Nobel laureates gather once every year to exchange notes in an informal and beautiful setting and to talk to young university students. In July 1991, when I had a chance to attend the Lindau conference as a journalist, I noted with regret the absence of any laureate from the Indian subcontinent among the 24 Nobel Prize winners in Physics who went there this year. Sir C V Raman was the first Indian to win the Nobel Prize in science in 1930. There is also a photograph of Yehudi Menuhin and his writing on the title page of Raman's paper on bowed stringes: To an authority on sound from an ignorant violinist.

The book under review, gives a very comprehensive account of the 'life and science' of C V Raman including a complete list of Raman's publications (17 pages). The 28 pages of Notes and References at the end of the book is a proof of the biographer's careful research and he can, in my opinion, be considered as one of the Boswells of India. The scientific account of Raman's work serves as a good introduction to many topics of classical physics. One is struck by the genius of Raman as he used primitive facilities in a primitive important scientific background to make discoveries. The book follows carefully Raman's career, with its ups and downs, from the beginning to the end. The analysis of Raman's character, with its strength and weaknesses as well as his confrontation with rivals, are described fairly by Venkataraman. Personally, as a one-time physicist from Calcutta, I read the book with a lot of nostalgia, noting how the scientific scene changed with time in India. I learned a lot of the petty clashes of interest and jealousy which caused Raman's departure in bitterness from Calcutta in 1933, where he had done his Nobel Prize winning work. (He had started his major scientific career, first, part time while he was an Assistant Accountant General, later as the Palit professor of Physics, in the Calcutta University). I also learned how glory of genius can decline with age. Still the inspiration of a genius like Raman, will have a permanent contribution to Indian Science for years ahead. In this I am in agreement with Venkataraman and I wish to congratulate him on his opus magnum. I recommend this book for all the libraries in India and for interested readers.

There are a few minor points of criticism that I would like to mention in conclusion. In the sketch on Meghnad Saha, there was no mention of the year of his death (1956). The title of the chapter *Oh Calcutta* shocked me a little, as it was the title of a nude and vulgar show running to packed houses in London for a long time. (The name had nothing to do with the city of Calcutta, rather it was an immitation of a French expression meaning : What nice buttocks you have). On a serious note, I think the biography would have gained a lot if a table of highlights of Raman's life were provided for a quick reference. I am supplying a sample below gleaned from the text.

## CHAKDRASEKHARA VENKATA RAMAN (1888 - 1970)

- 1988 born at Tiruvanaikkaval in Tamil Nadu on 07.11.88.
- 1899 passed the Matciculation Examination standing first.
- 1904 passed the B A Examination standing first with gold medals in English and Physics from Presidency College, Madras.
- 1907 obtained M A Degree in Physics standing

first, joined the post of Assistant Accountant General in Calcutta and started research work in spare time at Indian Association for Cultivation of Science (IACS), Calcutaa.

- 1912 secured the Curzon Research Prize.
- 1913 received the Woodburn Research Medal.
- 1917 left Government service and joined Calcutta University as Palit Professor of Physics.
- 1921 obtained Honorary DSc from Calcutta University and made his first visit to England.
- 1924 was made a Fellow of the Royal Society, London (FRS, London), visited Canada and the USA.
- 1928 discovered the Raman Effect on 28.02.28.
- 1929 Elected President of Indian Science Congress and was knighted.
- 1930 awarded the Nobel Prize in Physics.
- 1932 voted out of Honorary Secretaryship of IACS, Calcutta.
- 1933 appointed Director, Indian Institute of Science (IISc), Bangalore.
- 1935 founded Indian Academy of Science in Bangalore [National Institute of Science founded in Calcutta renamed Indian National Science Academy (New Delhi) in 1970].
- 1938 relieved of directorship of IISc and appointed Professor of Physics, IISc.
- 1941 awarded Franklin Medal by American Physical Society.
- 1947 became Director of Raman Research Institute, Bangalore.
- 1948 retired from IISc.
- 1954 decorated with Bharata Ratna.
- 1957 awarded the Lenin Prize by the USSR.
- 1970 C V Raman died in Bangalore on 21.11.70.