



Nobel Prize Nominator Sisir Kumar Mitra, F.R.S.: His Scientific Works in International Context by Rajinder Singh, Published by Sakher Verlag, Germany, Year of publication-2014, pages 182+x, price not mentioned.

In 1997, David Banks, a statistician at Duke University, authored a provocative paper suggesting that geniuses tend to "clot inhomogeneously". This is certainly true in India, and particularly in Bengal, where we notice several great scientists were born in clusters.

C.V. Raman (1888-1970)- the only Nobel Prize winner in physics from India, Sisir Kumar Mitra (1890-1963) – the father of ionospheric research in India, Meghnad Saha (1893-1956)– the pioneer of nuclear physics research in India, Prasanta Chandra Mahalanobis (1893-1972) – the visionary who introduced statistics and its application in formulating science policies of India, and Satyendra Nath Bose (1894-1972)– the discoverer of famous Bose-Einstein statistics, were all born within a span of about five years. (Another set of intellects were born about thirty years earlier-Jagadish Chandra Bose (1858-1937), Rabindranath

Tagore (1861-1941), Acharya Prafulla Chandra Ray (1861-1944), Swami Vivekananda (1863-1902)-again within a period of five years.)

Each of these scientists, with the exception of S.N. Bose, established their own institutions during their lifetime to undertake vigorous research in their respective areas. Meghnad Saha established the 'Institute of Nuclear Physics' (renamed as 'Saha Institute of Nuclear Physics' after his death) while Sisir Kumar Mitra established the 'Institute of Radio Physics and Electronics' in the same year (1949) at the same site, namely at the University College of Science of Calcutta University at Rajabazar Campus, to introduce post graduate studies and research in nuclear physics and radiophysics and electronics respectively. Finally, Prasanta Chandra Mahalanobis established the 'Indian Statistical Institute' in 1931 to undertake research in statistics and application of statistics and natural sciences for the economic development of India, while the 'S.N. Bose National Centre for Basic Sciences' was established by the Government of India in 1986 in memory of S.N. Bose more than a decade after his death.

Despite similarity in the actions and achievements of the above scientists, it is true that Sisir Kumar Mitra is less discussed, inadequately publicised and sparingly celebrated. Rajinder Singh noticed this lacuna and this book originated from his passion to fill this gap; in his own words, "to my surprise, little has been written on a man, who in India established ionospheric science". Being a reputed author on the history of science, Rajinder Singh has done his due diligence in conducting an intensive research on the life of Sisir Kumar Mitra, collecting materials and reviewing rare documents available in the archives of institutions and organizations of various countries. The end result is this book is much more than a typical biography.

Sisir Kumar Mitra is known as the initiator of wireless technology and ionospheric research. But his works on diffraction of light, on which he started working with Sir C.V. Raman and led to his obtaining the D.Sc. degree from Calcutta University, is less known even to the scientific community in India. Rajinder Singh has included all his research activities in painstaking detail, which I believe will satisfy all readers- from the casual to the serious. More

interested readers will benefit from the complete set of bibliographies presented by the author.

However, one of the most interesting and little known facts to emerge from the book is the role Sisir Kumar Mitra played to nominate Meghnad Saha for the Nobel Prize. As explained by the author, the Royal Swedish Academy of Sciences follows a set of defined rules to select people who are eligible to nominate. In order to make the nomination worldwide, the Nobel Committee requests established scientists of different countries to nominate, and to be requested to nominate for a Nobel Prize is itself a great honour. Sisir Kumar Mitra and D.M. Bose (then Ghose Professor of Physics, Calcutta University who later became Director of Bose Institute, Kolkata), both Chair Professors of Calcutta University, were requested to nominate for the Nobel Prize in Physics. The story as has been presented by Rajinder Singh is a story of intense sincerity, passion and zeal to have a Nobel Prize winner from India.

This is in sharp contrast to what is happening in India today, as has been reported widely in the media. On a

recent visit to India to understand why Indian scientists are not being nominated nowadays, Prof. Sven Lidin, Chairman of the Nobel Committee for Chemistry, lamented that around 5000 nomination forms are sent annually to individuals and institutes in 220 countries, and the response rate from India is abysmally low. The zeal and dedication shown by Sisir Kumar Mitra and others in nominating colleagues should be an eye opener to the Indian scientific community today who allow their invites to gather dust and rot.

Rajinder Singh has done a stellar job in revealing how political relationships or conflicts among scientists in the colonial era shaped their destiny as far as obtaining appropriate international recognition. It underscores the importance of socio-political relationship and networking of international scientists for proper acknowledgement, respect and appreciation. I congratulate Dr. Rajinder Singh for presenting a valuable book on Sisir Kumar Mitra which is sure to satisfy all classes of readers. This book will be a good addition to the personal collection as well as to the library. □

S. C. Roy

* This book review is written on the basis of the Foreword of the book written by this author and therefore the wordings are similar.