

Chandra, A Biography of S. Chandrasekhar, by K. C. Wali, Penguin Books, 1992, Rs. 95/-©

In August 1930, a 20 year old Indian student, on the long sea journey from India to England, made a startling discovery in the field of astrophysics. The discovery, revolutionized the subject and made the young man, who was on his way to Cambridge for his doctoral studies, very famous. The young man was S. Chandrasekhar and the discovery was the now famous Chandrasekhar Limit.

The book under review is a biography of Chandra (as he is universally known within the scientific community), by another physicist, K.C.Wali. Born in 1910 in a learned family (his uncle was the famous C.V.Raman), Chandra had his early education at home before going on to get his school and college degrees in Madras. His brilliance, especially his genius in physics and mathematics was recognized early. Wali describes very well Chandra's childhood and college years, specially his interaction with his siblings, his growing interest in science and his decision to make a life in science.

After college, Chandra secured a scholarship to study at Cambridge, where he did his PhD. with one of the preeminent astrophysicists of his time, R.H. Fowler. Chandra's hard work and sheer brilliance led him to work on and solve some of the most vexing problems in the field. A Fellowship at the famous Trinity college followed his doctorate and this was the time when he found himself being at the center of one of the most famous scientific controversies on 20 century science. Chandra's work on a fundamental limit to the mass of certain kinds of stars, did not find favor with A. Eddington, the ruling deity of astrophysics at that time. Eddington not only disagreed with Chandra's work but went to unbelievable limits to humiliate this young, unassuming, shy Indian in public. This set of events, which were to be of paramount importance in Chandra's life are recounted very well. Using mostly Chandra's letters to his father as a source, Wali reconstructs admirably the tensions and tribulations going on in Chandra's mind during this time.

After going through a phase of intense self-doubt, Chandra left England in 1936 to take up a position at the Yerkes Observatory near Chicago. Before this came marriage to Lalitha, a neighbor of his at Madras. Chandra has stayed in Chicago ever since, and done some of the most challenging work in astrophysics and mathematical physics. He is of that extremely rare breed of scholars who work in areas that they feel are important, whether or not they are fashionable. Chandra is well known in the physics community to work intensely in an area for several years, produce fundamental results, write a definitive monograph on the subject and then move on to a completely different area of interest!

Success has come in no small measure to this intellectual giant. Every single significant honor in the field has been bestowed upon him, including the Noble Prize in 1983. More importantly, his position as the father figure in astrophysics is absolutely unchallenged.

Even today, at 83 Chandra is as intellectually active as ever and his recent work on comparisons of Newton, Shakespeare and Beethoven is a path-breaking enquiry into the creative process in science and arts.©

Through his conversations with Chandra and his colleagues as well as extensive use of his papers, Wali tries to bring out the man behind the legend. He succeeds in giving us a flavor of Chandra's work and his personality. But he fails miserably in placing Chandra in a historical perspective. After all, Chandra's life has spanned some of the most turbulent times of our century and it is only natural to expect that his life was influenced by the events. Unfortunately, here Wali has no insights to offer. ©

©The excitement of scientific endeavor, the insights into the workings of academia, and Chandra's personality are all brought out very well. The most interesting part in the book are his conversations with Chandra on a variety of topics. There are some very obvious mistakes in the book like calling Vizag the capital of Andhra Pradesh, but overall the editorial and production standard is high.©

All in all, this is a very readable account of the life and work of one of the most brilliant scientists of our times. It is only natural for Wali to be in awe of his hero; one only wishes that Wali had developed some critical insights into the life and work of his hero instead of only sharing his hero-worship with us.