



***Subramaniam Chandrasekhar***

### **Subramaniam Chandrasekhar (1910-1995)**

Subramaniam Chandrasekhar, a nephew of Sir C.V. Raman, was born on 19 October 1910 in Lahore, (now in Pakistan). His father was an officer in the Department of Audits and Accounts of the Indian Government Services. Chandrasekhar received his elementary education from his parents and private tutors when he was in Lahore. In 1918 Chandra moved to Chennai where he attended the Hindu High School finishing his secondary school education with honours. He then joined the Presidency College, there taking his Bachelor of Science degree in physics with honours.

His first scientific paper, *Compton Scattering and the New Statistics*, was published in the Proceedings of the Royal Society in 1928. On the basis of this paper he was accepted as a research student by R.H. Fowler at the University of Cambridge. On the voyage to England, he developed the theory of white dwarf stars, showing that a star of mass greater than 1.45 times the mass of the sun could not become a white dwarf. This limit is now known as the Chandrasekhar limit.

He obtained his doctorate in 1933. Soon after receiving his doctorate, Chandrasekhar was awarded the Prize Fellowship at Trinity College, Cambridge. In 1937, he accepted the position of Research Associate at the University of Chicago. Chandrasekhar stayed at University of Chicago throughout his career, becoming the Morton D. Hall Distinguished Service Professor in Astronomy and Astrophysics in 1952. In 1952 he established the *Astrophysical Journal* and was its editor for 19 years, transforming it from a local publication of the University of Chicago into the national journal of the American Astronomical Society. He became a US citizen in 1958.

He was elected Fellow of the Royal Society of London and in 1962 received the Society's Royal Medal. He also received the US National Medal of Science (1966). He was awarded the Nobel prize for Physics in 1983 for his theoretical work on the physical processes of importance to the structure of stars and their evolution. Chandra was a popular teacher who guided over fifty students to their Ph.D.s including some who went on to win the Nobel prize themselves!! His research explored nearly all branches of theoretical astrophysics and he published ten books, each covering a different topic, including one on the relationship between art and science.