



***Meghnad Saha***

### **Meghnad Saha (1893-1956)**

Meghnad Saha was born on 6 October 1893 in Sheoratali village near Dhaka in present day Bangladesh. His father Jagannath Saha was a grocer in the village. After primary education, he was admitted to a middle school that was seven miles away from home. He stayed with a doctor near the school and had to work in that house to pay for his boarding and lodging. Overcoming all these difficulties, he stood first in the Dhaka middle school test, thus securing a Government scholarship and joined the Dhaka Collegiate School in 1905.

Great political unrest was prevailing in Bengal, caused by the partition of the province by the British against strong popular opinion. Meghnad Saha was among the few senior students who staged a boycott of the visit by the then Governor, Sir Bampfylde Fuller and as a consequence forfeited his scholarship and had to leave the institution. He then joined the Kisorilal Jubilee School where he passed the entrance test of the University of Calcutta standing first among students from East Bengal. He graduated from Presidency College with mathematics as his major.

He then joined the newly established Science College in Kolkata as a lecturer and pursued his research activities in physics. By 1920, Meghnad Saha had established himself as one of the leading physicists of the time. His theory of high-temperature ionization of elements and its application to stellar atmospheres, as expressed by the Saha equation, is fundamental to modern astrophysics; subsequent development of his ideas has led to increased knowledge of the pressure and temperature distributions of stellar atmospheres.

In 1920, Saha went to Imperial College, London and later to Germany. Two years later he returned to India and joined the University of Calcutta as Khaira Professor. He then moved to the University of Allahabad and remained there till 1938, establishing the Science Academy in Allahabad (now known as the National Academy of Science). In 1927, he was elected a Fellow of the Royal Society of London.

He returned to the University of Calcutta in 1938 where he introduced nuclear physics into the post-graduate physics curriculum. In 1947 he established the Indian Institute of Nuclear Physics (now known as the Saha Institute of Nuclear Physics). Later in his life, Saha played an active role in the development of scientific institutions throughout India as well as in national economic planning involving technology.