



Homi Jehangir Bhabha

Homi Jehangir Bhabha (1909-1966)

Homi Bhabha was born on 30 October 1909 in Mumbai. Son of a barrister, he grew up in a privileged environment. In Mumbai he attended the Cathedral & John Connon School and then Elphinstone College, followed by the Royal Institute of Science. After passing the Senior Cambridge Examination at the age of sixteen, he joined the Gonville and Caius College in Cambridge with an intention to pursue mechanical engineering. His mathematics tutor was Paul Dirac, and Bhabha became fascinated with mathematics and theoretical physics. He earned his engineering degree in 1930 and Ph.D. in 1934.

In 1937, together with W. Heitler, a German physicist, Bhabha solved the riddle about cosmic rays. Cosmic rays are fast moving, extremely small particles coming from outer space. When these particles enter the earth's atmosphere, they collide with the atoms of air and create a shower of electrons. Bhabha's discovery of the presence of nuclear particles (which he called *mesons*) in these showers was used to validate Einstein's theory of relativity making him world famous.

When the war broke out in Europe, Bhabha was on a holiday in India. In 1940, C.V. Raman, then head of the Physics Department, Indian Institute of Science, Bangalore, persuaded Bhabha to join the institute as a Reader in Physics and Bhabha decided to stay back in India. In 1941, Homi Bhabha was elected Fellow of the Royal Society, London, in recognition of his contributions to the field of cosmic rays, elementary particles and quantum mechanics.

Bhabha soon realized the need for an institute fully devoted to fundamental research, and wrote to J.R.D. Tata for funding. This resulted in the establishment of the Tata Institute of Fundamental Research (TIFR) in Mumbai in 1945, with Bhabha as the Director, a position he held until his death. In 1948, Homi Bhabha was appointed the Chairman of the International Atomic Energy Commission. Under his guidance, nuclear reactors like the Apsara, Cirus and Zerlina were built. He gained international recognition for his excellent work and served as the President of the first United Nations Conference on the Peaceful Uses of Atomic Energy, which was held in Geneva in 1955. He was the President of the International Union of Pure and Applied Physics from 1960 to 1963.

A multi-faceted personality, Bhabha was immensely fond of music, painting and writing. Some of his paintings are displayed in the British Art Galleries and the TIFR art collection today is rated as one of the best collections of contemporary Indian art in the country.

He is the recipient of the Adam's Award, Padma Bhushan, an Honorary Fellow of the American Academy of Arts and Sciences and Foreign Associate of the National Academy of Sciences in the United States.