

Shanti Swarup Bhatnagar

## Shanti Swarup Bhatnagar (1894-1955)

Bhatnagar was born on 21 February 1894 at Bhera, in the district of Shapur in Punjab (now in Pakistan). When he was barely eight months old, his father passed away. He spent his next thirteen years under the care of his maternal grandfather in Bulandshahar in Uttar Pradesh. Under the influence of his grandfather, young Bhatnagar not only developed a taste for engineering and science but also became interested at a very early age in geometry and algebra and in making mechanical toys. In 1911, Shanti published a letter to the editor, in *The Leader*, Allahabad, on how to make a substitute for carbon electrodes in a battery using molasses and carbonaceous matter under pressure and heat.

Matriculating the same year, he joined the Dayal Singh College, Lahore. After finishing his intermediate examination in first division, Shanti joined the Forman Christian College and after his B.Sc and M.Sc degrees, he spent the next two years at the University of London earning his D.Sc. degree on the surface tension of oils, under the supervision of Professor F.G. Donnan.

Returning to India in 1921, he joined the Benares Hindu University as a Professor, remaining there till 1924. From 1924 to 1940 he served as the Director of the University Chemical Laboratories, Lahore, addressing problems in industrial and applied chemistry.

In August 1940, Bhatnagar took over as the Director of the newly created Directorate of Scientific and Industrial Research. This organisation became the Council of Scientific and Industrial Research, with Bhatnagar as its Director. Bhatnagar's tenure saw the setting up of 12 laboratories and the total number of CSIR laboratories today stands at 40.

The British Government conferred on him the Order of the British Empire and in 1941, he was made the Knight Bachelor. In 1943 he was elected a Fellow of the Royal Society and received the Padma Vibhushan (1954) from the Government of India.

Shanti Swarup Bhatnagar played a significant part along with Homi Bhabha, Prasanta Chandra Mahalanobis, Vikram Sarabhai and others in building of post-independence Science & Technology infrastructure and in the formulation of India's science policies.