

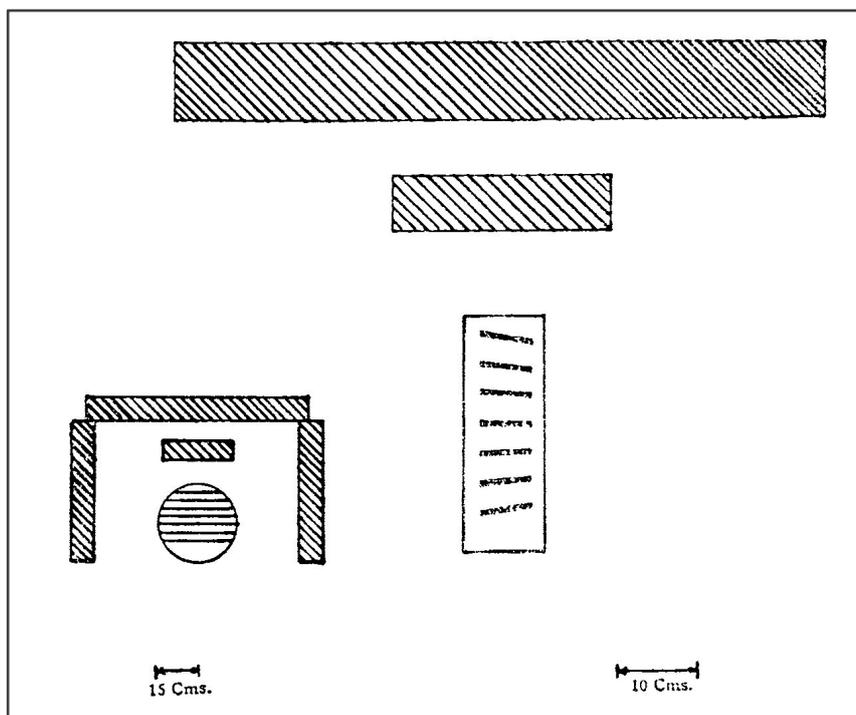
## Remembering Bibha Chowdhuri

The first woman scientist at TIFR and a prominent figure in High Energy Physics



Dr. Bibha Chowdhuri, *the first woman scientist of TIFR*, got her PhD from Manchester under the supervision of Noble laureate Prof. Blackett. Prior to that she had worked at Bose Institute with Prof. D.M. Bose, one of the pioneers of the cosmic ray research in India, where she made significant contributions towards the discovery of mesons using photographic plates. She is also the *first Indian woman* in the field of high energy physics.

She joined TIFR in 1949 as a research fellow in an Experimental Physics group working on cloud chambers. Particularly, she worked on extensive air showers of ionized particles, where she setup experiments using lead plates and cloud chambers. The lead plate on the top of the chamber was used to produce the air shower, while lead plates of different thicknesses inside the chamber were used to measure the penetrability of different particles. Her work titled “[On the penetrating component in air showers](#)” was published in 1952.



Front and side views of the cloud chambers and the lead absorbers. Image credit: Bibha Chowdhuri, R.C. Saxena, On the penetrating component in air showers (1952).

She left TIFR in December 1953 to join the Bengal Engineering College in Kolkata and later continued research at the Physical Research Laboratory in Ahmedabad. She continued to work on air showers at the Kolar Gold Fields and many TIFR scientists have fond memories of interactions with her. Bibha was a life-long researcher, she also carried out experiments with the cyclotron at VECC, Kolkata and continued to publish until her demise in 1991.

In 2019, the International Astronomical Union honoured her by naming a star in the night sky, HD 86081, as Bibha. Recently her biography titled “A Jewel Unearthed: Bibha Chowdhuri” was released by Rajinder Singh and S. C. Roy. As pointed out by S.C. Roy,

*“Seen in the Indian context, the courage exhibited by Bibha Chowdhuri to undertake physics research for a PhD degree is legendary.”*

A special ASET colloquium featuring life and science of Dr. Bibha Chowdhuri is planned on Feb 11, 2020 on the occasion of International Day of Women & Girls in Science. The talk will be delivered by S.C. Roy.