

Remembering Dr Shanti Swarup Bhatnagar

Dr Shanti Swarup Bhatnagar, the eminent scientist and the founding Director of CSIR, was born on 21 February 1894. To celebrate his birth centenary there was an exhibition, a Hindi play and a brief function in the NAL auditorium on Monday afternoon. K. N. Raju welcomed the participants attending the centenary function and briefly recounted Bhatnagar's major achievements, A. K. Singh introduced the afternoon's speaker, S. Ramaseshan. The stage was then set for a most charming lecture by Ramaseshan (who began by saying 'Sir Bhatnagar was born this very day 100 years ago, and, I believe, almost at this very moment!').

The title of Ramaseshan's lecture was 'Dr S. S. Bhatnagar—Some Rambling Thoughts', but apart from the occasional digression (I enjoyed the story of how Bhatnagar waved away young Ramaseshan's question on his famous book with a disarming 'arre chhodo yaar, I wrote that book long ago and now I've forgotten everything!'), there was little in the lecture which could be described as 'irregularly arranged' (my dictionary's meaning of 'rambling'). Indeed, Ramaseshan's tribute to Bhatnagar was skilfully strung together into an elaborate historical tale about how one needs an 'arrow effect' to make science prosper.

It was a delightful tale narrated with a flair and aplomb that perhaps only Ramaseshan is capable of. We won't even attempt to recount the tale here (many of us are secretly hoping that Ramaseshan will one day write it up himself!), but I must remark, here, what a pleasure it

was to sit back and listen as one anecdote after another unfolded itself in Ramaseshan's delectable prose: how the British built the world's best railway workshops first in Howrah, and 'when the attractions of the port city proved distracting', moved it to Jamalpur!; how 'famous principles of science' emerged from the surveys of India; how the lethal Dum Dum bullets were invented; how Sir Ronald Ross (of malaria fame) helped the medical services in the country of his birth; and how the geological survey unearthed the Kolar Gold Fields. It was, Ramaseshan argued, 'very purposeful science' dictated by the compelling British need (the 'arrow') to rule and exploit.

By the time Bhatnagar enters the narrative, the Indian freedom movement is going great guns, the 'arrow' is becoming much less penetrative, strong shoots of Indian physics are growing (led by C. V. Raman and others) and Indian science 'is beginning to speak up'. And who can be a better spokesman for Indian science than a young Jawaharlal Nehru? (Ramaseshan's description of a Congress meeting in 1936 where he heard Nehru speak passionately on fascism and science to the Indian peasant, and where the young Ramaseshan simply couldn't take his eyes off a radiantly beautiful Vijayalakshmi Pandit, was one of the high points of the lecture).

About Bhatnagar himself, Ramaseshan had a most wonderful collection of stories: how Bhatnagar solved the famous oil drilling problem by using his basic knowledge of science; how Bhatnagar

generously gifted away the princely personal reward that followed; how Raman played a role at many stages of Bhatnagar's career (This did not prevent him from strongly criticizing Bhatnagar for CSIR attracting away scientists from the universities thus denuding them); and how Raman wrote to Nehru when Bhatnagar retired that he should be paid a pension equal to his salary; how Bhatnagar could compose poems which moved even the strongest to tears; how applied science came so easily to Bhatnagar that he sometimes (wrongly) considered the exercise to be as simple as 'dropping pennies in the slot'; how Bhatnagar's plan to send young scientists abroad contributed to the flowering, among others, of Satish Dhawan and Brahm Prakash; and how Bhatnagar cleverly marked sensitive notes to K. S. Krishnan for comments ('that was the best way to bury the note!').

*With best compliments and
respectful regards from
S. S. Bhatnagar*

To
Sir C. V. Raman N.L.
Bangalore

Bhatnagar's inscription in his book *Magnetochemistry*.

Srinivas Bhogle, National Aerospace Laboratories, Bangalore. Reproduced from *The Information Pasteboard*, NAL.