OBITUARY

Prof. Yash Pal
A Multifarious Personality

BHARAT ADUR

Prof. Yash Pal, well-known educationist and science communicator is no more. He passed away on 24 July 2017.

A self-confessed atheist who opposed belief in astrology and religious rituals dismissing them as unscientific, Prof. Yash Pal was born on 26 November 1926. After graduating with a Master’s degree in Physics from Panjab University in 1949 and a PhD degree in Physics from the Massachusetts Institute of Technology in 1958, he started his career at the Tata Institute of Fundamental Research (TIFR), Mumbai, as a member of the Cosmic Rays group.

Yash Pal made significant contributions to the study of cosmic rays. Specifically, his work led to the first observation of negative meson, first observation of pair-production of elementary particles, elucidation of the properties of k-mesons and hyperons, first measure of K-K mass difference, prediction of the rise in p-p cross-section, and recognition of the importance of excited states of particles in multiple meson production at high energies. He was the first to develop the leady-box model of cosmic-ray propagation in the galaxy.

When in 1972 the Government of India set up its Department of Space and embarked on an independent space programme, Yash Pal took charge as the first Director of the newly set up Space Applications Centre, Ahmedabad in 1973.

Yash Pal’s administrative assignments at the government-level and beyond began with his appointment as the Secretary General of the Second United Nations Conference on Peaceful Uses of Outer Space (1981–82), Secretary, Department of Science and Technology (1984–1986), after which he was appointed Chairman, University Grants Commission (UGC) (1986–91).

During his tenure as UGC Chairman, he advocated the setting up of the Inter-University Centres funded by the UGC, on the model of the Nuclear Science Centre (now Inter-University Accelerator Centre), New Delhi. Institutions such as the Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune emerged from this vision.

Pal was a member of UN Advisory Committee on Science and Technology for Development, Scientific Council,
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International Centre for Theoretical Physics, Trieste and Executive Committee and United Nations University. He was also the Chancellor of the Jawaharlal Nehru University (2007-2012).

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Pal’s involvement in school education dates back to the early 1970s, with the path breaking Hoshangabad Science Teaching Programme. A group of scientists, engineers, educationists and social activists formulated a vision of developing a model of school science teaching close to the ideal envisaged in various policy directives. The main objective of the project, which came to be known as the HSTP (Hoshangabad Science Teaching Programme), was to explore the extent to which innovative changes can be introduced within the framework of the government school system.

In 1993, the Ministry of Human Resource Development (MHRD), Government of India, set up a National Advisory Committee, with Prof. Yash Pal as Chairman, to go into the issue of overburdening of school children. The report of the Committee “Learning without Burden”, is now regarded as a seminal document in Indian education.

Prof. Yash Pal also submitted a 94-page report of ‘The Committee to Advise on Renovation and Rejuvenation of Higher Education’ to the Union HRD minister in June 2009. The committee not only pointed out the challenges to the higher education sector, but also set an agenda for action. According to the report, the higher education sector faces the challenges of loss of primacy of the universities, erosion of their autonomy, undermining of undergraduate education, growing distance between knowledge areas and the isolation of universities from the real world outside and crass commercialisation. According to the report, the universities should be made responsible regarding the academic content of all courses and programmes of study, including professional courses.

The Committee also said that it should be mandatory for all universities to have a rich undergraduate programme and undergraduate students must get opportunities to interact with the best faculty. Undergraduate programmes should be restructured to enable students to have opportunities to access all curricular areas with fair degree of mobility.

Prof. Jayant Narlikar remembers: “….The Inter University Centre for Astronomy and Astrophysics (IUCAA) was his brainchild in a sense. A lot of the effort behind its creation was his. He always strived to find the right people for the right job. This tendency to give importance to human resources is a rare quality. When Yash Pal decided to set up IUCAA in Pune, he asked some scientists, including me, for advice on the project report for it. We worked hard and produced a comprehensive report for UGC’s approval. I was satisfied we had done a good job. However, that was not the end of the story. In short, there was no going back. It was typical of Yash, always a tough taskmaster!”

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