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EDITORIAL

The Raman legacy

C. V. Raman is one of the great icons of Indian science. Best known for his remarkable work on the scattering of light and his discovery in 1928 of the effect which bears his name, Raman's career spanned the most critical period of the growth of modern science in India, from the 1920s to the 1960s. The high point of his career came in 1930, when he received the Nobel prize for physics. In the public perception, the Nobel award immortalized Raman. His life and times have been chronicled in great detail in G. Venkataraman's scholarly biography, *Journey into Light*. Raman was an unusual scientist obsessed with his physics and passionately concerned with natural phenomena; attributes that often left him furloughing a lonely path. He was unsuited for the rough and tumble of science administration, which often requires finely-honed political skills. Indeed, he was the only Director of the Indian Institute of Science, who was compelled to resign. This distinction, like his Nobel prize, has remained unmatched. In an era of institution builders, which saw the spectacular growth of government-supported science, Raman remained a firm critic of the manner in which Jawaharlal Nehru and his advisers approached the issue of promoting scientific development of India. Raman launched, from the sidelines, in the 1950s, many trenchant attacks on governmental policies, some of which will undoubtedly find an echo even today. Upon his retirement from his position as professor of physics at the Indian Institute of Science in 1948, he moved across the road to build his own private laboratory, which today is the Raman Research Institute (RRI). On the 50th anniversary of its founding, it is indeed appropriate to consider the totality of the Raman legacy.

In Raman's heyday, romanticism was still an important feature of science. His extraordinary achievements and personality served as a magnet for generations of students attracted to physics. Raman's students, spread over the breadth of the country, included many of the most accomplished scientists of post-independence India. But Raman in his own inimitable way was also a creator of institutions; not always were these mere constructs of bricks and mortar. He recognized the need for scientific journals in India and helped in the starting of

Current Science in 1932. Soon thereafter in a powerful editorial he recognized the importance of an Academy for science. A man of action, driven by impulse, often impatient with his surroundings, Raman founded the Indian Academy of Sciences in 1934, over which he imperiously presided until his death in 1970. Today, the Academy publishes many of India's scientific journals and retains a strong tradition of promoting scientific activity. The Academy's recent forays into the area of science popularization would have surely gladdened the heart of its founder. Raman's institute is today the Raman Research Institute, focusing on frontier areas of research, ranging from astrophysics and astronomy to liquid crystals. In the post-Raman era the institute has embraced government funding and is one of the many centres of advanced research directly funded by the Department of Science and Technology. Following Raman's passing in 1970 all these institutions were suddenly orphaned, an inevitable consequence of his intensely personalized approach to their functioning. Fortunately, in an environment where institutional decay is all too common, the Raman legacy was nurtured through the difficult days of the post-Raman period by Sivaraj Ramaseshan, for whom this act was indeed a labour of love. It is largely a consequence of his efforts and those of many other dedicated individuals that all of Raman's creations are both viable and vigorous today. The *Current Science* Association, the Academy and the Raman Research Institute coexist in harmony on a sylvan campus, much of whose greenery can be traced back to Raman. *Current Science* and the Academy are institutions, which have evolved characteristic styles of functioning that have withstood the vagaries of time. Raman was always concerned about the building of large national laboratories, which he feared would eventually become 'mausoleums of science'. His own creations have acquired a life of their own and are a fitting monument to the man. Indeed, they may survive long after the lustre of the Nobel prize has begun to fade.

P. Balaram