We should now graduate from the problem-solving (from being good students) to the problem-posing stage, and particularly problems which are relevant to us. We are excellent in creating structures which are solely export-oriented, like our IITs. There is scope for major reorientation there. We still focus on the West for recognition. The true sign of coming of age would be when we attain confidence in our own capability and merit that we do not have to look for recognition outside.

I find it astounding to read proclamations like 'one good result, one hydrogen bomb, superpower by 2025', and so on by the most respected scientists of the country. No one great individual or no one profound result could change the overall ambience. It is the ambience that matters and determines progress.

In this regard, two events are worth mentioning, One, the revolution in telecommunication: From an interior tribal

village one can call an equally isolated place on the other side of the globe effortlessly. This was achieved by Sam Pitroda about 15 years ago and was by all means remarkable. Second, the recent IT super power phenomenon has happened without any committed efforts of a Pitroda-like. This has happened because over 50-odd years we have built up a large pool of scientifically and technically trained young women and men. It could not have happened because of a Raman or Bose alone. The former event shows that given a right kind of leadership and mission, we have the capability to achieve the best. The latter shows that we have latent potential which could emerge spontaneously whenever an opportunity crops up.

Finally, I would like to appeal to all my fellow scientists that we must, as persons of learning and scientific training, take part in discourses on issues of wider social concern. It is our duty and responsibility to give educated, informed and wise counsel to people at large, who have been supporting our upkeep and facilities adequately, for letting us do what we like. One does not see many of us participating in debates on wider issues like atomic bomb and power, big dams, and overall development paradigm. It is not enough just to pursue one's own specific discipline dexterously, which one must do at any rate. We are part of a larger intellectual community and as intellectuals our concerns must not entirely remain within the narrow confines of our disciplines.

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Scientific research and academic developments crave for new lease of life

The state of academic developments, in general, and in science and technology (S&T) in particular, has undergone a deep decline making resurrection improbable in the country. Reference is often made that we badly need a Nehru and a Bhabha to promote S&T in India1. In addition to establishing a series of research laboratories under the purview of Council of Scientific and Industrial Research, and also founding five Indian Institutes of Technology (IITs) considered to be miraculous feats, Nehru convinced Bhabha to meet Indian astronomers working abroad and ask them to establish observatories in India. The response was overwhelming and the outcome is that the country today enjoys the unique global reputation for its facilities in the field of radio astronomy in particu-

Whatever be the written policy of the government², the testing ground is the execution and its practice, where we have failed miserably. Universities are

worst affected and the effect is also seen on the academic commitment and research output of IITs. Pointing out some of the glaring disparities in the recruitment system, Virk¹ argues for better salaries to NET-qualified scholars. But how many of these scholars are dedicated to pursuing an academic career. Those who are serious and dedicated in carrying out quality research hardly complain about fellowships and contingent grants.

Some novel and daring action is certainly needed for rejuvenating the academic atmosphere in the country. Our active and brilliant scientists should be called for an open debate to settle the issue. I wish to pen down a suggestion for breaking the ice and launching a system of contractual appointment with higher emoluments in the country. Once we succeed in launching such a programme, we will be able to attract many of the Indian scientists and engineers working abroad to come home and put

their might in toning up the sinking morale of dedicated teachers and researchers. A forewarning or caution is that launching such a system may encounter resistance and opposition from majority of our own teachers who have developed expertise in settling scores with the government departments. An alternative is the development of private universities and institutes that could compare with Harvard, Stanford, Cornell and the like. Any delay in taking such an action may cost the country heavily.

- 1. Virk, H. S., Curr. Sci., 2002, 82, 1308.
- Virk, H. B., Carrister, 2002, **82**, 1308.
 Lavakare, P. J., *ibid*, 2002, **82**, 613-614.

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