Raising science in India á la NSU: the hunting of the Snark

Just the place for a Snark! I have said it twice:

That alone should encourage the crew
Just the place for a Snark! I have said it twice.

What I tell you three times is true.

I have borrowed freely from Lewis Carroll in the hope that for the cause of science he will not object. The snark and its hunt by a motley crew led by a captain who «... had only one notion for covering the ocean, and that was toingle his bell»
makes a good parallel to the National Science University (NSU) proposal. The proposal, liberally criticizing the Indian University research and education, has been described and summarized in good measures, by people outside the universities, in a recent issue of Current Science. The NSU paper makes repeated assertions and searches through the problem of science in India to find the solution it wants. One difference being, for the snark story, Lewis Carroll candidly prefaces his piece with a tongue-in-cheek defence against the charge of writing nonsense. That such a proposal should be considered seriously at the implementation level is an indication of the extent to which the scientific and political leadership is divorced from ground necessities and social consciousness. There exists what is called, by C. Wright Mills in a different context, «The Power Elite» in our scientific and political milieu. Therefore, it will not be surprising if the «extraordinarily naive» (to quote P. Balaram) NSU proposal is accepted. This will lead to the formation of a new National Science University with an outright government grant of Rs 200 crores. However, that will be a sad day for the needs, requirements and direction of science and also education in India. The flip side will, of course, be that the NSU will be located at or near a major international airport making it within the reach of the bright young aspiring Indian research student who routinely travels via the liberalized open skies!

Present status and the need for improvement

«We have sailed many weeks, we have sailed many days, (Seven days to the week I allow) But a Snark, on which we might lovingly gaze, We have never beheld till now!»

There is no gainsaying the fact that there are serious deficiencies in the education and practice of science in India. The last couple of years have seen in news media and science journals, a renewed discussion of the ills and shortfalls afflicting the scientific community and the extent of our science and technology development. Our relative ineffective contribution to scientific development, the drop in the quantum of students opting for science, the stuflifying effect of the growth of administrative and bureaucratic machinery in Universities and Central Agencies—these are only some of the indicators of our quagmire situation.

The NSU proposal does highlight, akin to the way of the jester Tenali Rama in our folklore, our status and need in science education and research.

What is to be done

«Come listen, my men, while I tell you again The five unmistakable marks By which you may know, wheresoever you go, The warranted and genuine Snarks.»

It is obviously not reasonable or meaningful to provide one line summary solutions to the ills of science and technology having an etiology related to the history, socio-economics and politics of our land. But the prime cause definitely lies in the manner, delivery and orientation of our education—not only that of science. Careful and in-depth analysis of our education system has been made and remedial measures have been suggested earlier. Our education system suffers from the irrelevance and rigidity of our curriculum, the unscientific teaching methods that destroy the inquisitiveness of the students, the lack of proper basic educational facilities, the outmoded examination sys-
Correspondence

National Science University—Imported drug for an impoverished patient?

Current Science brought out a special section dealing with a so-called new concept ‘National Science University’, the proposal (in an edited form) and some reactions. Having read the articles, and being a ‘Mere Resident Indian’ (MRI) working scientist, I could not help reacting a little and putting down my ‘Swadeshi’ views on this topic, at the same time echoing some of the thoughts expressed by D. Balasubramanian and T. V. RamaKrishnan.

My very first reaction on reading through the ‘Mahajan proposal’, particularly the beginnings was one of extreme familiarity, as I have been hearing and experiencing all that is said, in the last eighteen years of my working life here. Anyway, the ills mentioned are nothing special for science—it is just the Indian ethos reflected in every walk of life. However, in science these ills look worse because of a general feeling that, practitioners of science ought to be above common desires. Coming to the suggestions for the National Science University, does one really believe that making available US $50,000 would simply make the person change his/her basic instincts? Having an International(!) Advisory Committee and freedom from bureaucracy make one a better scientist? Regarding the general performance, is it a fact that the scientific standards are low in all other institutions except the two mentioned in the report? What is the criterion that one should adopt for comparison of intra-institutional performances within the country? How much introspection has been made in this context and why should an NRI proposal be considered as the answer for putting Indian science on an international pedestal at a cost of Rs 200 crores of the Indian tax-payers? From the report and the articles that appeared alongwith, it almost looks that ‘the NSU is fait accompli’ and if so it may not be of much use to discuss anything now. If it is not, it is very pertinent to discuss the particular points raised by both D. Balasubramanian and T. V. Ramakrishnan regarding the role of NRIs in this venture and for the demand of a new set of framework exclusively for NSU.

Further, as they both point out, the report on the one hand points a finger at the ‘quota’ system as being responsible