

CORRESPONDENCE

Book Trust, Children Book Trust, National Council of Educational Research & Training, NCSTC, etc. at nominal prices written by content experts in popular style is indeed a healthy development.

In another significant landmark, the Prime Minister P. V. Narasimha Rao inaugurated the National Science Centre, (NSC) in New Delhi on 9 January 1992. Built at a cost of Rs 15 crores, NSC is said to be one of the finest in the world and the largest in Asia. The interactive nature gives it distinction and the visitors to this museum easily have their curiosity aroused. The year 1992 also

witnessed a nationwide S&T communication-cum-literacy event, the *Bharat Jan Gyan Vigyan Jatha (BJGVJ)* – a grand unification of two *Jathas*, viz. *BJVJ* (1987) and *Bharat Jan Gyan Jatha* (1990).

At the NGO level, the Indian Science Writers' Association (ISWA), the national body of science communicators, held its first ever National Convention on 12–13 February 1993. While assuring full support to ISWA for popularization of science in his meeting on 15 March 1993, Hon'ble Minister of State for S&T, P. R. Kumarmangalam welcomed the demand of ISWA for a National

Science Communication Policy, a major recommendation of the ISWA Convention. On 14 May the foundation day of the ISWA has been celebrated as the First National S&T Communication Day with 'Industrial R&D Communication' as the theme for the year 1993.

All said and done, the need of the hour is to set up the much awaited National Media Centre for S&T Information like the Quick Access Information System of CSIR for Mass Media.

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Some suggestions for *Current Science*

I just received the copy of *Current Science* with Prof. Peters' obituary. The article is well printed. Thanks. May I be allowed to make one or two personal comments on *Current Science* which is in my opinion one of the best edited and artistically finished scientific journals. Firstly it is necessary to train someone who can keep up the standards

for a long long time in the future, when most of us are gone.

I notice the issue has good overall scientific coverage, but few technical notes. These are important for the growth of the journal. Why can we not insist that each of the major institutions in India, e.g. TIFR, PRL, IISc, RRI, CCMB and many other institutions

make a commitment to publish at least one technical note per month in *Current Science*.

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OPINION

What ails Indian academics?

P. Narayanan

Divergent opinions and remedial measures have been expressed in this journal on how to save Indian science. There appeared also a special section on 'Science and technology in the post-liberalization era', wherein many issues in science and technology have been the topics of discussion.

Compared to pre-Independence era, there are now many well-established institutions/research centres and there are better opportunities to student as well as academic communities to avail the opportunities, incentives, rewards and recognitions. The objectives of the establishments are also broad-based.

However, the collective achievements in science and technology, humanities, social sciences and all other fields seem to have fallen short of our own minimum expectations. China seems to have done better than us in utilizing her resources and human potential to record commendable achievements in science and technology, health care, population control and alleviation of poverty of her populace. We seem to have lost the initiative, fervour and earnestness that existed in the academic arena in the pre-Independence era (circa 1900–1940). So, where, how and why did we go wrong?

Comparison of the development of

institutions in our country with similar institutions of other countries would be of help to underscore the basic issues. As a case study—the oldest universities established by the British were to serve as degree-conferring institutions to serve the administrative and other needs of the British Raj. Stanford University, comparatively younger than these universities, started and functioned with similar objectives. But, after the Second World War, the management of the Stanford University transplanted the 'egg heads' of New York to expand its activities (Columbia University was its model). Stanford, among other things,

imported scholars of high-motivation, dedication, commitment, track-record, etc. The New Yorkers also went to California because of attractive salaries and congenial 'academic' atmosphere. Therefore, motivation, commitment and such should also be obligatory on the part of the institutions and their management to create an atmosphere for creative endeavours.

Things have gone wrong in our academic institutions not due to any inherent fault in our concepts, and not due to lack of scientific culture and lack of understanding the spirit behind it, but due to our approach in their implementation. For example, generally academic institutions in Europe, with their reverence to traditions, might appear overbearing with Herr professors lording over their academic folks. In contrast, American universities might project nonchalance and irreverence to authority and protocol. Whatever may be the appearances, attitudes and the organizational set-up, they have never lost the sight of the primary objective, namely promotion of academic atmosphere. The loss of academic atmosphere is one of the major casualties in our approach to realize our objectives. Our academic institutions are fast becoming temples sans idols.

Probably, the approach to academic endeavours might be as business, as fun and as one's bounden duty in a Teutonic, American and Indian Institution, respectively. What could be the reason for such an attitude? All our institutions are fashioned and administered according to the blue-print of civil service rules and regulations. Our aca-

democratic institutions in essence are extensions of bureaucracy-oriented governmental networks. In a 'command-control' system individual or collective endeavours must conform to the rigid bureaucratic constraints and protocols. Such an atmosphere would knock out any fun or curiosity and concepts such as dedication and commitment sound hollow. No wonder our country has excelled in producing 'managerial' and 'clerical' academicians. We may criticize the bureaucracy but we are all practising partners—using it for one's advantage when it suits and deriding it for public consumption.

It is argued that substantial funding is needed to carry out quality research. It is true for experimental sciences, but lack of funding does not explain the reasons for the dismal atmosphere prevailing in other areas of academics. It is also argued that we should invest sufficiently to build-up the infrastructures to cull our bright young students and train them towards achieving excellence. This, of course, we should and must continue doing. But, as the things stand today, can we say with confidence that in a decade or two the academics in Indian soil would be able to project Nobel-level scholars in science, medicine and economics? This loss of self-confidence, that our predecessors had, half a century ago, seems to be the crux of our problems. So, in order to reap the fruits, lest they might also turn sour, the existing ethos of our academic culture must be changed.

Introspection without a practical way out to the problems would make life more miserable and guilt-ridden. There

is 'something basically wrong in the state of Denmark' and assertions that 'we are second to none' would not alter that situation. The voices from the Deep, such as 'thought of science and technology are receding from the ordinary folks', which should not come as a surprise to any of us, are the indicators of what is really happening at the grass-roots level in all walks of Indian academics.

In summary, we went wrong at the operational level of implementation of our goals, by imposing 'command-control' mode of approach to academics also and then adhering to that approach dogmatically all these decades. To mitigate our institutional problems we could/should evaluate the performance of institutions in other countries and find out why they are doing better than us. Our educational system is based on the British model; but the British are doing alright in science, technology and in other fields and they are receptive to the changing roles and functions of academic institutions to the changing times. It would be certainly worthwhile to look into the aspects that made our pre-Independence era so vibrant academically, socially and culturally and gave scope to the expression of native endeavours. It would also be pertinent to address, by way of introspection, whether we have been toppling the foundations in the process of building castles.

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COMMENTARY

Allosteric regulation in search of a role

J. Manjrekar

A near-casualty of the recent riots in Bombay was an international scientific meeting held at the Tata Institute of Fundamental Research (TIFR). Many participants braved the riots to gather to felicitate two stalwarts of Indian biology. The meeting, titled 'Internation-

ational Symposium on Contemporary Genetics', was organized in honour of Obaid Siddiqui and Pabitra Kumar Maitra of the TIFR Molecular Biology Unit, both of whom are nearing retirement.

Talks were by and large related to the

areas in which Siddiqui and Maitra have been working, namely neurogenetics of *Drosophila* and biochemical genetics of yeast. While most of the presentations emphasized the invaluable contributions of genetic approaches to the study of a variety of problems in