Will the NCHER Bill help take research back to educational institutes?

The government is in the process of undertaking reforms and restructuring of the higher education sector in pursuance of the recommendations of the Yash Pal Committee. To aid and advise on implementation of such reforms and restructuring, a Task Force was constituted by order dated 7 September 2009. The Ministry of Human Resource Development (MHRD) website provides a draft of the National Commission for Higher Education and Research (NCHER) Bill, and states that 'The draft legislation on the establishment of the NCHER as approved by the Task Force is placed for consultation in the public domain for obtaining feedback and suggestions from all stakeholders'.

The report of 'The Committee to advise on renovation and rejuvenation of higher education' is also available on the MHRD website. The Committee, chaired by Yash Pal noted that:

1. 'Teaching and research have to be inseparable, because the task of the university is not only to impart knowledge to young people but also to give them opportunities to create their own knowledge'. [p. 9 of the report]

2. 'Universities were historically conceived as spaces where teaching and research go together. They are closely linked. Research and teaching are simply different aspects of academic work. To teach effectively at the university level, one needs to actively engage in research' (p. 13). It notes (p. 14) that '...and costs of research, especially in the context of science and engineering, have become very high'.

I feel that we should debate whether the NCHER Bill, as in the publicized draft, will help take research back to the educational institutes.

S. Dattagupta¹ had noted that: ‘If we consider the success stories in physics, especially in the Western world, we would quickly realize that most of the breakthroughs have come from university settings,... In our country, however, we have kept teaching divorced from research, by building research institutes outside the university system’. He also observed, ‘The second reason that we have not seen world-class contributions emanating from our physics community is that physics is essentially an experimental science’.

Condensed matter physics is an area in which many educational institutions do experimental research. I did a quick search on the website ‘PROLA’ for publications in Physical Review B during 2009. This journal has reasonable credibility, with convenient ‘search’ facilities. There were 135 publications with an Indian byline; of these 81 were experimental papers. Of these 81, 36 papers had only Indian bylines. I looked at these in some detail. Entities (institutes/laboratories) under DAE accounted for 19, entities under DST for 3, entities under CSIR for 2, entities under MHRD for 6, and entities under UGC for 9. (Three papers had across-category authors.) The UGC figure looks deceptively impressive. However, only one was authored entirely from a university.

It is well recognized that research in science disciplines is no longer inexpensive. We must facilitate national synergy in research efforts across universities, and optimize the investments in sophisticated research infrastructure. Committed research institutes, as distinct from ‘advanced instrumentation facilities’ (that also optimize investments), are needed within the educational system governed by the proposed NCHER. The ‘Instrument Scientists’ here are practicing researchers who must compete with the best internationally. Their research expertise helps teachers and research scholars to actively engage in research with minimal absence from the ‘teaching’ institute. The many benefits of such research institutes existing within the educational system have already been demonstrated by the three physics-based institutes (viz. IUCAA, IUAC and UGC-DAE CSR) set up by UGC 20 years ago. I suggest that the need to proliferate this model must be explicitly enunciated in the NCHER Bill.


P. CHADDAH

UGC-DAE Consortium for Scientific Research,
University Campus, Khandwa Road,
Indore 452 017, India
e-mail: chaddah@csr.ernet.in

Remuneration for distinguished scientists

Cherayil’s¹ criticism against the opinions expressed by BSR³ is not completely justified. During my discussion with many, including some scientists with recognitions cited here, it is the continuous payment of a monthly remuneration that seems to have surfaced the differences in opinion. What happens if a Nobel Prize winner is not only credited with a package at the time of the award but also a monthly package of take-home fiscal benefits? Would it not create a social problem apart from the professional bitterness? This immediately reminds me that the Nobel Prize has no age limit. Then why not the generous policy makers for science promotion in India have conveniently forgotten those illustrious scientists and technologists who had enjoyed the recognitions under discussion but unfortunately are not in service now, although some of them are more active than some of these earmarked scientists and luckily not yet retired! It is time that the policy makers for promoting science in India must recognize that formal retirement has no real connotation for a good scientist. They are as good as they could ever be. There must be some programmes/schemes to harness good quality science from these retired scientists with no age restrictions. In reality, the number of such good track record scientists would be quite small to make any dent on the exchequer but it may have a telling effect on the quality of science in the country.


KALLURI SUBBA RAO

Centre for Biotechnology,
Jawaharlal Nehru Technological University, Kukatpally,
Hyderabad 500 085, India
e-mail: ksrsl@yahoo.com