refers to the worries of some people about the possible damage to Indian science. Such worries are totally misplaced. If the fabric of science in India is fragile, it is precisely because of the absence of disagreement and controversy. Dissent is an essential condition for the health of science. Thesis, antithesis and synthesis are essential for the dialectical process of approaching truth.

The editorial also proceeds to justify on grounds of lack of originality the rejection of the paper estimating the kilodeaths that would result from a Hiroshima-type bomb on Mumbai. That is a matter for the author to dispute, but what needs to be pointed out here is that the journal does publish papers, classified as lectures, that show little evidence of originality and/or refereeing.

In the midst of the euphoria over Pokhran II, it was in fact a political decision not to publish a paper estimating the possible destruction of human life in an

Indian metropolis from the use of nuclear weapons. In that context, Current Science unfortunately showed more concern for its own safety rather than for its founder's mission of spreading truth and awareness. Hopefully, such a lapse will not recur with the elan now characterizing the journal.

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Presentation in seminars

The editor deserves appreciation for his editorial 'presenting science' (Curr. Sci., 1999, 77, 1005–1006), wherein he pointed out the all-round poor presentation of research work by a large group of Ph Ds from across the country. He feels that this is the general prevailing trend in most seminars/symposia.

For this sorry state of affairs, he rightly held research supervisors, academic bodies of the universities, and UGC responsible; along with prevailing differences in quality and infrastructure of the research laboratories across the country. However, he missed mentioning CSIR, which too appears to be casual in its approach in monitoring the various research projects – although perhaps it cannot be directly held responsible for this. I feel that another reason for lack of quality presentations is because the really good and motivated students are generally not available for doing research necessary to achieve academic excellence. Academia for awarding Ph Ds thus seem to have become commercial workshops.

However, the editor neither suggested any remedy for improving the presentations nor for making Ph Ds more credible. I, therefore, wish to outline a comprehensive Ph D programme – which I drew up in 1973 – for the admission, working, presentation, submission of thesis and examination. Unfortunately, the proposal was not approved by the Academic Council and the faculty of my university. I intentionally mention the year so that one can assess whether the same procedure can be applied in the present scenario.

Under this plan, a student seeking admission to Ph D should first give a seminar on any topic of his interest in the subject concerned; another seminar should be given before applying for registration on the subject he proposes to pursue for research, outlining the methodology to solve the selected problem. The third seminar, prior to writing the thesis, should concern the results obtained and their interpretations. The final seminar of course will be the Ph D viva voce examination itself. If in the first three seminars the candidate fails to meet the minimum level of standard set by the department, he should repeat the seminar after a suitable fixed time interval. But the assessment of the candidate by examiner/s in the fourth seminar should be based on the candidate's competence in defending his thesis.

Continuing on the subject of poor presentation, the editor has rightly raised the point about the time a speaker spends on the display of slides/transparencies,

and the numbers involved - opinions, though, may vary on this point. Although with the help of these visual aids, the speaker is undoubtedly able to give a lot of information in a short time, the large amount of information presented and rapidity with which the slides are projected makes it difficult for the audience to assimilate the material. Therefore, as a rough guide, I feel that slides/ transparencies should be displayed for not more than half the time allotted for the presentation. In addition, liberal use of chalk and board - the presentation methods of good old days - should be considered. This would be a welcome change, which provides relaxation to the understanding-faculty of the audience from the mind-bogging details.

However, all said and done, the point to be realized is that unless the basic stuff for the operation and management of research is of first-rate quality excellence in research cannot be achieved. Today, all that we are attempting is nothing more than just a patch-work.

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