Motivating young minds towards science

On one hand, we are lamenting over the fact that there are only a few takers for science; on the other, we are not allowing young graduates and postgraduates to mingle with the scientific elite. A few fortunate ones get a chance to mingle with the scientific community through the summer fellowships offered by various academies. Only when a student is aware of the various opportunities in the scientific research arena can he/she take up science. This is possible only if students get a chance to explore the works being undertaken in our scientific institutions.

But most of our so-called proponents of science seem to stick to the old dictum - 'at least in our country do not learn more than what your age demands'. When a national seminar on human genome was conducted in Thiruvananthapuram last year, the organizers denied permission to a group of B Sc students because they would not be able to grasp the seminar sessions. When persuaded, they informed them that if B Sc students were given permission to attend the seminar, the organizers would not be able to accommodate M Sc and Ph D students. These enthusiastic students had to go back dejected. Finally, on the day of seminar a lot of seats were vacant and help from the neighbouring academic staff college was taken for filling up the seats. Is this the way of creating scientific interest?

Attending seminars and visiting scientific institutions are the only means by which students can explore what is happening in the scientific field and the opportunities available, so that they can get attracted to a scientific career.

Visiting scientific institutions is difficult, because one has to go through a tedious official process. Also, only few institutions give permission for the same. There is no chance for a student to meet scientists in order to clarify any doubts. Most scientists evade the student community because they may not be able give satisfactory explanations to the students.

A few years ago, a postgraduate student visited one of the premier research institutions of the country for reference. The student carried along with him a few herbarium specimens for proper identification. Obtaining information from the security staff at the entrance, the Director of the institute summoned the student and scolded him for carrying the herbarium specimen. He said, 'the duty of our scientists is not to waste time in these petty

things, ... a minute of talk with my scientific staff will be a national waste ... if you want to get it identified you should send it through your teacher.' No one understands what might have passed through the mind of that student. After all lending a helping hand to a student is in no way going to be national wastage of time

In recent days, many scientific institutions have started giving training to students after collecting hefty fees. But students are not given individual exposure to various techniques or instruments.

In some university libraries also, B Sc and M Sc students are faced with humiliation. They are denied access to Ph D theses section, even though theses survey is an important part in dissertation works.

If these injustices are not rectified, most our bright students will shy away from science.

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Indian women scientists

The universities of Bombay, Calcutta and Madras were founded in 1857 (ref. 1). The history of the Calcutta University shows that in 1883, Kadambini Ganguli and Chandramukhi Basu became the first two women graduates². However, it took a few years until a joint effort was made by women to raise the issue of education. The first All-India Women's Conference took place in Poona on 5 January 1927 (ref. 3). Women discussed not only the issues of 'purdah' and early marriage, but also passed a resolution and 'demanded that primary education for boys and girls be made compulsory, that the present vernacular textbooks be revised and supplemented by books suitable for children and that women should be on all attendance committees,3. From this moderate start, after about 75 years, some women have achieved high positions. However, sometimes the price is high. Surendra's letter⁴ points out the difficulties faced by women related to career and family.

It seems to me that Surendra is not aware about a few articles in which the authors discuss this issue and offer solutions. To make a start, to the interested readers of *Current Science*, I may suggest excellent articles by Namrata Gupta and Arun K. Sharma^{5,6} (details can be found in Gupta's Ph D thesis; private commun., 14 February 2003).

 Biswas, A. K., Science in India, Firma K. L. Mukhopadhyay, Kolkata, 1969, p. 48.

- 2. Banerjee, P. et al. (eds), Hundred Years of the University of Calcutta, Kolkata, 1957 (figures 74 and 75).
- 3. Anon., Indian Rev., 1927, 28, 111–112.
- 4. Surendra, L., Curr. Sci., 2003, 85, 8.
- 5. Gupta, N. and Sharma, A. K., Soc. Stud. Sci., 2002, 32, 901–915.
- 6. Gupta, N. and Sharma, A. K., Soc. Action, 2001, **51**, 395–416.

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