

## Training of technical teachers needed

A common misconception is that states like Andhra Pradesh have more engineering seats than required. The fact is different when compared with global statistics. We need multifold engineers to meet the vision of our great leaders. We have travelled a long way in the growth of technical education, starting from the establishment of the Madras Survey School in 1794 and the Roorkee Engineering College in 1848. Today, we have a few thousand technical education institutes throughout the country.

The Sarkar Committee (1950), Engineering Personnel Committee (1955), Committee on Postgraduate Education and Research (1959), Kothari Commission (1964), Madan's Committee (1974), Central Advisory Board of Education (1974), Nayudamma Committee (1978), National Policy on Education (1986), U. R. Rao Committee (2003), High Power Committee for Faculty Development in Technical Institutions (2006) and Yash Pal Committee (2009) have given valuable suggestions to the government. In

all these reports, there has been no hint that the growth in the number of institutes should be limited. It has been iterated that the quality of teaching in technical education has to be improved.

In line with these recommendations, four National Institutes of Technical Teachers' Training and Research (NITTTR) were established in 1967, to train and develop the skills of teachers to deliver quality education in technical institutions. In 1967, there were around 130 engineering colleges in India. Even today, these four institutes cater to the needs of more than 5000 institutes. To supplement the NITTTRs, the University Grants Commission has established over 66 Academic Staff Colleges (ASC) in a few reputed universities. These colleges deal with technical education in addition to other programmes. The Yash Pal Committee has also recommended the establishment of B Tech (Ed) programmes.

In order to meet the requirements of quantity and quality of technical teachers, training programmes need to be

started especially in government-aided engineering colleges, which are reputed and more than 20 years old. Highly qualified and talented faculty is available in these institutes, who can promote research leading to doctoral degrees. I need not mention here the paucity of doctoral-level technical teachers in India. To enable this, the number of academic programmes in these colleges should be drastically reduced at least for the next 5 years. Temporary reduction in the courses offered would not greatly affect the society, as the number of undergraduate and postgraduate students in these reputed government institutes is less than 2% of the total intake. The goals laid down in the Vision 2020 document can be met if such programmes are considered soon.

SADASIVUNI SUDHA TUSHARA

*Gayatri Vidya Parishad College of Engineering,  
Visakhapatnam 530 048, India  
e-mail: tushara@ieee.org*

## Stairway to heaven, or ...

If you are remotely related to science and have spent some time in Bengaluru, you cannot but have attended meetings or lectures at the imposing J. N. Tata Auditorium across the busy C. V. Raman Road from the Indian Institute of Science.

The architecture of the auditorium, however, betrays a singular lack of scientific thought, common sense or concern for the potential user who may be physically challenged. There is no evidence that the architects or the 'scientific minds' that conceived the building imagined that someone in a wheelchair might visit the building. A Stephen Hawking, for example, will simply have no way of reaching the lecture hall, by himself.

Based on personal experiences, permit me to list a few gory details to illustrate the trauma and horror that a physically challenged person, such as myself, can be subjected to at this otherwise plush and pretentious auditorium. To get to the lecture halls of the auditorium, you need to climb three steps from the porch to the interior of the building, and a further 18 steps (in thoughtful installments of 7 and 11) before reaching the auditorium.

Of course, if at some time, you should be unfortunate enough to need to use a

toilet there, you will have to climb down some 16 more steps before walking about 10 m to get to the toilet – and later, retrace your steps in the reverse order. The toilets, needless to add, are not equipped to accommodate the needs of one who cannot even get out of her wheelchair by herself.

And then, if you should happen to want to spend the entire day at the meeting, you will need to negotiate something like 16 steps to get down to the area where coffee, lunch and refreshments are served during intermissions, and all this for perhaps 3–4 times during the day, not to mention a few trips to the toilet.

This letter is a plea to the supposed intelligentsia of this country to reflect on the condition of the not so able-bodied and their right to lead a life of dignity in an inclusive and enlightened society.

People like me are serious professionals who seek no sympathy or special allowances on our behalf. What we do seek, nay demand, is a humane environment that is more aware and sensitive to special needs, enabling us to continue making productive contributions despite physical limitations. This enjoins on society to do some introspection in plan-

ning buildings, campuses and events that are inclusive and participatory.

Is it not the duty of any civilized society to: (i) intelligently plan its cities and buildings so that they are more concerned about and accessible to the differently abled? (ii) refuse to organize events at such torturous and insensitive venues? (iii) and even boycott all events held at such inconsiderately designed buildings?

Surely there are laws of the land which can compel all public buildings to provide such amenities. Instead of taking the perverse route of legal injunctions and hefty penalties, I would rather appeal to the directors of the various institutes and presidents of various academies in this 'science city' to not organize events at venues which are not universally accessible, and thereby ensure that science is not rendered inaccessible to some people whose only fault is not possessing the 'ideal and flawless body'.

V. S. SUNDER

*The Institute of Mathematical Sciences,  
Chennai 600 113, India  
e-mail: sunder@imsc.res.in*