Science and society - New light from universities

The sole objective of science is to understand nature. Like art and literature, it is an urge to lift the man above the animal. It enriches and ennobles human life. It has profound impact even on the layman: The removal of our planet (Earth) from the centre of the universe by Copernicus, Galileo and Kepler, the discovery of universal gravitation by Newton, blood circulation by Harvey, the evolution of species by Darwin, and now the advent of interplanetary travel, the unravelling of the genetic code and the continued search for extra-terrestrial life (e.g. Mars Pathfinder Mission).

In our egalitarian society, the excellence of a few may not sound democratic. In a democracy the majority view. prevails. The validity of a proposition or the correctness of a doctrine depends on the numeric strength of the people who support it. However, the soundness of an ideology is often inversely proportional to the popular support it commands. Creative ideas are suppressed or forestalled. We must come to realize that even common man considers the works of art, literature and science as not merely icing the cake but as the essence of human existence. This provides a healthy climate in which all members of the society rejoice and delight in the things that a small number of exceptional members are able to do without being questioned about its relevance.

It is at the universities that much creative work has been done and appre-

ciated. For the future too, we must look to the universities to maintain and improve the high standards of the past, to recognize and preserve for posterity and interpret the works of genius wherever they are found, to encourage excellence of all degrees in its students and faculty members. No act should belittle the striving for excellence. The central point is to find and support creative teacher scientists in the universities, the number of which is sadly on the decline. In my own Alma Mater, examples of Bhatnagars or Narlikars served as beacons for excellence in the not-toodistant past. All efforts should be made to restore a similar trend. Excellence cannot thrive on democracy. It must be borne in mind that the centres of excellence or national laboratories cannot substitute universities which alone provide fertile ground for the offspring to germinate and grow. The classroom lectures in the formative years of any student leave an indelible impression on what he ought to do in his future career.

In a temple of learning, the understanding should be enlightened and the character enriched. These virtues need to be given top priority. And the university campus in the post-independent era must return to a place where virtues of discipline and non-violence, should be written as with a sunbeam on everyone's mind, let alone the students'. Consequently, students tend to realize 'Right to choose and wrong to shun' as time progresses. Quality of life then

assumes paramount importance and is never sold in the hands of those who profess and advocate for quality of living. In our own times, an intellectual is sadly a man who is intelligent enough to know which side his bread is buttered. And it is easy to swim with the tide. We must come to appreciate the intuitive knowledge of our ancients to derive some fundamental lessons. The knowledge acquired from teachers or from books is at most repetitive, imitative and derivative. Therefore, there seems to be an urgent need to help/encourage anyone committed to scientific pursuit even in this grim, rat-race societal scenario. And it can be accomplished by exceptional individuals recalling Buddha's last words to his disciples, 'Look not for refuge to anyone besides yourself'.

In conclusion, healthy society hinges on excellence. And democracy thrives on excellence and thereby inspires much as in the 8th century event. When Shankaracharya travelled on foot from Kerala to Kashmir and from Dwaraka to Puri, he was held in the highest esteem and reverence. Even today excellence helps society in the way as 'A little light expels much of darkness'.

B. N. DWIVEDI

Department of Applied Physics, Institute of Technology, Banaras Hindu University, Varanasi 221 005, India