VOX Populi...

Ethics in scientific research.

"A full page (out of 22 pages in *Nature*, 16 December 1993 on the absence of ethics in research) was devoted to ... the Gupta affair involving false claims ... by an Indian scientist regarding Himalayan fossils.

"Such incidents have a highly demoralising effect on the young and uninitiated, many of whom may be planning careers in science...

"The most important elements of a code of professional ethics among scientists address fundamental questions of authorship, quality, direct responsibility to prior work, property rights of scientists to their work... Whilst these codes have generally served Indian scientists well, one does occasionally hear disturbing reports of the flagrant violations of scientific ethics.. .by senior scientists.

"In this country, more often than not, those who indulge in unethical practices get away and continue to flourish under official patronage. Ironically, those who fight for upholding the highest traditions of science are subject to victimisation...

"As early as 1946, the distinguished biologist A. V. Hill, on the basis of whose report the CSIR laboratories were established, wrote: `The important thing is not a creed... What matters is that scientific men should argue and discuss the matter of scientific ethics as one of infinite importance to themselves and to the rest of mankind with the same honesty, humility and absolute regard for the facts they show in their scientific work. If they do, then something will surely crystallise out from their discussion and I have faith enough in the goodness and wisdom of most scientific men to believe that the result on the whole will be good and wise. It may in the end be embodied in a new Hippocratic Oath; or it may be absorbed in trade union rules for the scientific profession; or ethical behaviour in science may just come to be accepted as an honourable obligation, as unbreakable as that of accuracy and integrity. (*Chem.Eng.* News, 1946)"

> Bakhtaver S. Mahajan Homi Bhabha Centre for Science Education *Times of India (3* 1 January 1994)

(Mahajan touches upon a vital raw nerve. Research can prove meaningful only if both means and the end are scrupulously honest and truthful. It is especially sad that in a land that produced a person who spent a lifetime experimenting with truth, we have scientists who should be committed to knowledge and learning, but, in fact, spend more time and energy in one-upmanship than on extending the frontiers of knowledge. Their lust for power and wealth is in striking contrast to the forces that drove such individuals as Louis Pasteur, Marie Curie or Alexander Fleming in the west and Sir C. V. Raman or Jagdish Chandra Bose here..

The foundation of *Society for Scientific Values* in New Delhi in 1986 aroused a hope that remains unfulfilled. As with the Medical Council of India there has been an outpouring of words but almost no perceptible action. Cynics waggle fingers at the office bearers of this Society suggesting that their conduct in attaining and clinging to positions of power needs scrutiny.

We shall focus on this theme in a subsequent issue. Editor)