

Misconduct in science

A recent article in *Nature*¹ 'India to propose regulatory body to curb misconduct', notes that India is seriously considering to form a national body to investigate the plagiarism and misconduct in science, spreading like cancer in our scientific community. Actually during the last 60 years India has made considerable investments for the development of S&T and hundreds of research institutions have come up during the period in the country. However, in many of these, a healthy scientific environment is totally lacking, causing frustration among the younger generation, that wants short-term gains without any serious efforts. A healthy scientific environment is one which is free from prejudices, bureaucratic formalities, dishonesty, propaganda of false research claims, and sycophancy to bosses, political manoeuvring, drumbeating, etc. Most of the scientists are honest, while some may commit scientific fraud by deliberately deceiving colleagues and/or the public with false claims. They may report experiments that have never been conducted, describe observations that do not exist or distort data and illustrations to appear more convincing. Basically such scientists are not seekers of truth; they occasionally succeed in becoming important in scientific manage-

ment and spoil a whole generation of scientists. The longer the period such persons remain in power at a particular place, greater is the damage done. At times the science managers share an equal responsibility when they shut their eyes to get a laudable claim for nothing.

Scientists, as a rule follow an accepted code of conduct. They begin with experiments designed to answer a scientific question or create a new product. They present their results to colleagues and then publish them in a scientific journal. A good quality journal requires independent experts to certify that a paper's results are valid and genuine. This process assumes that published work is of high standard. But peer review is not designed to detect fraud and reviewers can be fooled by fraud that is well disguised. After all, reviewers do not witness the experiments, and may not notice if data are fabricated or altered. The fraud, often, comes to light only when other scientists are unable to repeat the experiments.

As pointed out by Balaram², plagiarism and fabrication of results are among the most common and clearly recognized forms of deviant behaviour spreading like cancer and time is ripe to dissect them out. The recent cases of misconduct in science either at NCCS or at SVU dis-

parages the lack of surveillance and shared sense of dignity and accountability. It also reflects a deterioration of ethical, moral and social values of life, and our scientific community is no exception³. As pointed out by Chopra⁴, these values in the pursuit of S&T are coming to the centre stage in the emerging globalized knowledge era and scientists must remember that public discussion of values and ethics requires justification, as in any other scientific argument. Social, ethical conclusions are based on general principles and not on a person's 'feelings', lifestyle or ideological values. Further, it is of utmost importance to promote by personal and collective efforts, the ethics and norms of science not only for progress of S&T in the country, but also for building its national character.

1. *Nature*, 2008, **452** (7183), 15.
2. Balaram, P., *Curr. Sci.*, 2005, **88**, 529–530.
3. Nagar, P. K., *Curr. Sci.*, 2007, **93**, 594.
4. Chopra, K. L., *Curr. Sci.*, 2007, **93**, 441.

P. K. Nagar

B21/115-10A,
Batuk Dham Colony, Kamachha,
Varanasi 221 010, India
e-mail: nagar_pk2001@yahoo.co.uk

Observations on 'Plagiarism, a scourge'

The article on plagiarism by Rao¹ is an eye-opener for researchers. His observations that 'copy/cut and paste' tendencies have increased the plagiarism activity are a correct assessment of the situation. Rao has discussed various aspects of plagiarism. I would like to add one more point, which I have experienced.

The catalogue of earthquakes in India by Oldham² and Bapat *et al.*³ are the only published books available for a list of earthquakes in India. Oldham gives a descriptive listing of earthquakes in India until 1869. Bapat *et al.* give a simple list of about ten thousand earthquakes in and around neighbouring countries of India,

up to 1979. These references are often cited in most of the papers dealing with seismicity or earthquake studies in India. Sometimes statistical or mathematical studies are undertaken on these data. It is seen that a paper gives the above references as source and cites a number of earthquakes from these books. This is a good and regular practice. But the same author, in his subsequent papers, cites his previous paper as a reference about earthquakes and an impression is inadvertently created that the list of earthquakes is by the same author of the previous paper. Can it be called 'a camouflaged plagiarism'?

1. Rao, K. R., *Curr. Sci.*, 2008, **94**, 581–586.
2. Oldham, T., *Mem. Geol. Surv. India*, 1883, **19**, 1–53.
3. Bapat, A., Kulkarni, R. C. and Guha, S. K., *Catalogue of Earthquakes in India and Neighborhood from Historical Period up to 1979*, Indian Society of Earthquake Technology, Indian Institute of Technology, Roorkee, 1983, p. 211.

ARUN BAPAT

1/11, Tara Residency,
20/2, Kothrud,
Pune 411 038, India
e-mail: arun_bapat@vsnl.com