Poor science, poor journals

The question of quality of research published in *Current Science* should be seen in the wider context of quality of research in India itself. There is no gainsaying the fact that the centre of gravity of the world's scientific activity lies much to the west of India. Using western science as a benchmark, one can divide science in India into three categories.

The first category consists of scientific activity that is substandard and dispensable. Sadly, most of Indian science falls in this category. Since this science is done with the government's approval and money, it has to be provided with appropriate publication channels also. If an Indian research journal wants to be reputed, it cannot be representative.

Most of the remaining science constitutes the second category. It is derivative of western efforts and is peripheral to it. It aspires to be recognized as such and is therefore sought to be published in foreign journals. This work is not path-breaking. If it does not appear in 'their' journals, it is likely to be ignored; at times it may be seen and absorbed, but not noticed. Small rivulets that do not fall into a major stream lose their way in the sands.

In addition to the substandard science and peripheral science, there is a third category, which we may call competitive science. Minuscule in fraction, it is, or can be, in competition with efforts in the developed countries. Examples: high-temperature superconductivity, and flowering of bamboos. It is this segment of Indian science, and this alone, that really needs, or can profitably use, a competent Indian research journal.

Although the natural constituency of a quality journal in India is thus extremely limited, a strong case exists for upgrading Indian journals. For one, if Indian scientists publish good papers in Indian journals, which are inexpensive and freely distributed², Indian postgraduate students will become aware of frontline research. As things stand today, even a dedicated student is unlikely to know what lies beyond his rather outdated texts or what goes on in India on the research front.

Revitalization of Indian research journals will require coming to grips with two problems. First, like weeds stunting flowering plants, the existence of substandard science is a major hindrance to the development of worthwhile science. Paradoxically, unlike quality science which feels inadequate and restless, substandard science constitutes a system that is entirely selfcontented, self-sufficient and autonomous. If Indian science journals are generally taken to be synonymous with trivia, there would be a natural tendency for sensitive workers to try to associate themselves with foreign journals, which, even when not so reputed, have at least the advantage of large circulation and attractive get-up. Second, choice of capable referees is by itself not sufficient to raise the standards of a journal. This is so because a referee reviews a paper more or less at the level of the authors rather than at his or her own. The strength of a journal lies in peer pressure, in its set of authors being identical with the set of referees. Unless one paper's author is another paper's referee, a research journal cannot flourish.

There can be one redemption for Indian journals. While Indian scientists aspire for scientific recognition from abroad, social and profession recognition is sought at home. This recognition can be made conditional on proven service to Indian science effort. After all, if Indian learned bodies are good enough to be members of, their journals should also be good enough to write for.

- 1. Mahadevan, S., *Curr*. *Sci*, 1990, **59**, 442; Manohar, H., *ibid*
- 2. Vishwanathan, T, ibid

R. K. KOCHHAR

Indian Institute of Astrophysics, Sarjapur Road, Koramangala, Bangalore 560 034