

How to improve credibility of Indian journals

The standard of research in a country is judged by the standard of its research journals. During the early years of the 20th century, Germany, France and England were leaders of scientific research in the world. The rating of German research journals, viz. *Zeitschrift fur Physik*, *Z. Physik* and *Annalen der Physik*, was the highest in the world and all leading scientists published their research findings in these journals. After the Second World War, USA became the world leader in scientific research due to migration of top European scientists to America. The pedestal position occupied by German journals was snatched by *Physical Review*, the prestigious journal of physics from USA.

The academies of science in Europe took the lead in publishing their proceedings. In India, Asiatic Society of Bengal in Calcutta was set up in 1784. It published its own journal, but its concerns were more or less oriental studies rather than science. Indian Association for Cultivation of Science (IACS) was responsible for starting the *IACS Bulletin*. C. V. Raman set up Indian Academy of Sciences at Bangalore and published his papers, both in its *Proceedings* and *Current Science*, later on.

After India gained independence, the Scientific Policy Resolution was adopted by Indian Parliament in which it was envisaged to promote scientific research in India. A chain of national science laboratories was set up under CSIR and hence the need arose to publish Indian research journals also. Most of the Indian journals are published by National Institute of Science Communication (NISCOM) in New Delhi, under the patronage of CSIR. Indian Academy of Sciences also publishes about a dozen research journals, including *Current Science*. During recent years, some private individuals and publishers have also started publishing research journals but their rating is very low. Some of the Indian scientific societies and universi-

ties also publish their research journals. Guru Nanak Dev University, Amritsar may be the only university in India which started its research journals in almost all subjects of science and humanities.

India boasts of being the third largest scientific and technical manpower in the world. But the scientific research output of India is rated lower than most of the European countries, including Spain and The Netherlands. Bibliometric analysis of scientific research is an established technique to evaluate the quality of scientific research of an individual, institution or a country. Recent publications¹⁻³ prove that the impact factor of Indian journals is falling and SCI listing includes only one dozen Indian journals amongst 5000 or more selected from all over the world. What are the reasons for this downhill slide of Indian journals on the global scenario?

The reasons are obvious: Indian scientists wish to publish their scientific results in foreign journals, due to their high impact factors and credibility. It helps them to reach out to their peers in the scientific field. Our institutions also rate these publications high, if they are published in foreign journals. There are only a few foreign scientists who prefer to publish their research work in Indian journals. How to increase the visibility and credibility of Indian journals on the global scale? Some of the remedial steps are suggested to improve the quality of Indian journals.

The fellows of Indian national science academies and the other leading scientists must publish their scientific research in Indian journals. We must raise the standard of publication of Indian journals by inviting review articles from Nobel Laureates and leaders in scientific research. The quality of printing must improve, keeping in view the global market and international standards. Industrial houses must be invited to sponsor research journals on science

and technology. NISCOM must set its own house in order and cut down the delay in publication of research papers.

From my personal experience, I rate *Current Science* as the only Indian journal which has large-scale visibility and credibility in the international market. It is published regularly, twice a month, and is the only Indian letter journal which is a best match to *Nature*. Its special issues and reviews articles are of high calibre, publication of results fast and quality of printing excellent. It gives a lot of information on science-related issues, in addition to scientific findings reported in it. Of late, many foreign-based research scientists are reporting their findings in *Current Science*. Surprisingly, *Journal of Scientific and Industrial Research* published by CSIR had published more than 50% papers contributed by foreign authors¹. Two other journals which have attracted foreign authors are *Journal of Astrophysics and Astronomy* and *Journal of Genetics*, both published by Indian Academy of Sciences, Bangalore. The Indian journals lack professional touch. It is therefore suggested that CSIR or any other agency in India must promote scientific journals in various disciplines on a turn-key basis. Impact factor of Indian journals will also improve if all Indian scientists take a vow to publish in Indian journals only.

1. Arunachalam, S., Srinivasan, S. and Raman, V., *Curr. Sci.*, 1998, **74**, 433-441.
2. Aparna Basu *et al.*, NISTADS Report, New Delhi, January, 2000.
3. Virk, H. S., *Curr. Sci.*, 2000, **78**, 1280-1281.

H. S. VIRK

Department of Physics,
Guru Nanak Dev University,
Amritsar 143 005, India
e-mail: virkhs@yahoo.com