

commensurable dietary intake, many adverse effects including fatigue, decrease in productivity, loss of concentration may result.

Indian miners have high aerobic capacity related to body weight, but have low weights and heights compared with mine workers of developed countries. A study on mine workers of Germany had showed that there was as much 40% in the productivity loss between well and poorly fed mine workers. This inference emphasizes the need for proper study to establish benchmarks on minimum energy requirement for different types of physical work, dietary requirement for meeting energy expenditure and the status of dietary

intake by Indian mine workers in general, unskilled workforce in particular.

Major lacuna in the aspect being discussed is lack of data on the status and quantum of unorganized workforce that toils for exploitation of mineral resources, most often for a pittance. Without a baseline data, benchmarks cannot be established. The geologists have to take moral responsibility for the well-being of our fellow countrymen in general, the foot soldiers of mining industry in particular, that too in the unorganized sector. Hence, conducting research activities not only on mineral reserves in terms of their quality, extent, etc., but also on those who bring the mineral wealth to be used

for the economic development have to be given their due. This is not only in the interest of societal obligation of geoscientists, but also on the continued supply of workforce for efficient mining productivity which ultimately would result in better society.

MU. RAMKUMAR<sup>1,\*</sup>  
R. PARIMALAVALLI<sup>2</sup>  
K. ANBARASU<sup>1</sup>  
R. SURESH<sup>1</sup>

<sup>1</sup>Department of Geology, and

<sup>2</sup>Department of Food Science,

Periyar University,

Salem 636 011, India

\*e-mail: muramkumar@yahoo.co.in

## Sixty years of independence and state of Indian peer review

Today, in any assessment of a scientific study, one is asked how many papers he/she has published in foreign journals and what is the impact factor of these journals. The person's work is then evaluated mostly in terms of how much he/she scores in terms of impact factor and citation, since premium is placed on high impact foreign journals, their citation features more compared to publication in Indian journals. In fact, based on this assessment it has become so simple and objective that even an expert (or peer) committee is probably not needed now. An assistant working in the recruitment cell (who has good high school or XII standard training in science/mathematics) can calculate the merit of a candidate, on the above basis. Obviously, the top scientific management is convinced that this is the best way to judge the quality of contributions and contributor(s). And from one point of view, it also appears quite reasonable. However, there do exist some issues, which are as listed below.

1. It obviously implies that only 'peer review', mostly by the Western experts, is worthwhile. And as not much faith is reposed in publications in Indian journals, it implies that the Indian peer review system (IPRS) is not quite up to the mark. Various science academies, the Science Congress, the Knowledge Commission, SACPM, etc. need to give some thought and ask: why, even after six decades of political independence, the country has not been able to develop – in any

field of S&T – a reliable IPRS of international standard? In other words, we remain engaged in intellectual dependence (or should one call it a deep-seated inferiority). If this is not done, obviously publications in Indian journals (including in *Current Science*) will continue to be looked down upon by eminent Indian scientists. Or should we seriously consider closing down Indian journals, because what is the use if our own scientists do not value them enough?

2. One of the main reasons for the above could be that barring perhaps a few exceptions, the formulation problem, methodology, data and interpretation of such data are often imitative, i.e. 'original thinking' on these issues mostly emanates from the Western research centres. This may imply a dismal lack of originality in our approaches (one hopes the Knowledge Commission is listening). Also, the 'Follow-the-West' path has become necessary because, if the problems and methodology pursued by the West (also termed frontier and/or cutting edge research) are not followed, the Western peers may not be interested (or impressed) and the study may not get published in high impact factor journals. Alternatively, a totally different approach to problem formulation, methodology, etc. may face difficulty in getting a nod from the reviewers and attempts of originality in such cases are likely to be miscarried.

3. From the above, the need for developing a solid peer base (of international

standard) of Indian scientists and nurturing of originality is obvious. Else, we may have passed six decades of independence, but our intellectual freedom may remain a distinct dream under some pretext or the other. For example, science is an international pursuit and should not be confined to petty national boundaries. But if this argument is true, then why the Indian Nobel (as the Bhatnagar Prize is fondly called), why not compete only for the International Nobel.

4. Indian journals, unlike their Western counterparts, are not able to get industrial/financial support. For example, note the difference in the advertisements that appear in *Current Science* and in *Nature* or *Science*. This vital link with the industry may also significantly contribute to the high impact factor.

5. Assessment of IPRS and Indian journals, in the eyes of top scientific managers, is a matter of serious concern and should not be put under the carpet. After all, for most of the departments in Indian universities, these Indian journals (which alone they can afford with difficulty) provide the only window for fresh endeavours of scientific research.

U. RAVAL

H. No. 2-1-49/10/C,  
Street No. 11,  
Suryanagar, Uppal,  
Hyderabad 500 007, India  
e-mail: kv\_swamy@yahoo.com