## Peer reviewing in Indian S&T journals

Scientific journals function as carriers of embodied and codified knowledge. Their role is not restricted to publishing research findings only, but to orient the researchers, particularly the young generation of scientists in the right direction of research. This is possible by publishing high quality research papers, referencing to the high level research papers and reviewing the submitted manuscript. Reviewing of submissions leads to the increased quality of papers, as there is a clear and marked difference between the original submission and final version. Even if all reviews are not equally good, when reviewers ask the authors to revise a paper, authors are directed to improve the con-

Identifying suitable specialist reviewers who are able, objective, effective and efficient in doing the job, without pay, thanks or recognition, also remains a constant and major challenge<sup>1</sup>. Even peer reviewing has a few flaws, despite the benefits. High esteem journals consider peer review by more reviewers, draw a wellknit reviewing mechanism and resort to blind referring. The reported deficiencies in peer review such as subjectivity, bias and delay<sup>2</sup> are removed by counteractions initiated by the journals. Many journals now opt for blind reviewing, open peer review, and dynamic and responsive peer reviewing where authors have the right of replying to the reviews, which is placed with the editors who take decisions like judges. Moreover, the reviewers are named and accountable for their decisions and their contributions are acknowledged3. The constitution of the editorial board and the panel of reviewers of journals reflect the level and quality of a journal.

India publishes a large number of journals; many of them are just so-called journals characterized by the absence of review and qualitative content. This is evidenced by the low reception to them at the international level. Many of them are virtually ignored by peers and potential users. The level and quality of Indian journals has been questioned in earlier papers<sup>4</sup>.

With this background, we intended to identify the extent of peer-review practices in the Indian S&T journals. Measuring

the peer review practices of journals is a difficult task as the system of peer review of journals is not explicit. However, using several mechanisms, we are able to track the reviewed journals. Some of the parameters which we have used are:

- 1. Journals indexed by International databases such as *ISI*, *Scopus*, etc. and the scholarly search engine 'google scholar' and others which list only peerreviewed journals (the number of hits for journals from 'google scholar' is considered).
- 2. The eminence of editorial board members (assessed through the number of papers in *SCI* indexed journals and citations).
- 3. Data in published papers such as date of receipt, date of revision and date of acceptance given in the journals.
- 4. Authors acknowledgements to the reviewers.
- 5. Number of citations the journals receive from other peer-reviewed journals, and
  - 6. Expert opinion.

There is no comprehensive list available on the journals published in India in S&T. The Indian National Scientific Documentation Centre (INSDOC now NISCAIR) published a Directory of S&T journals in 1992. Since then, no list has been compiled and no record is available. Hence, the list of S&T journals published was compiled by direct scanning of all journals published in S&T. We were mindful that only the publications that meet the characteristics of 'journals' are included in this list.

Many Indian journals claim that they do the reviewing of submissions and some journals even contain the term 'international' in their title. These claims lack credibility and validity. The exercise, using the above listed criteria is carried out and an extensive micro-level scanning of journals was done by us in a period of 18 months. The results are as follows.

Among the analysed 1835 journals, 145 (7.9%) have listed their editorial board; however, we realize that many journals never use their expertise for review or content optimization. By applying the

parameters mentioned earlier, the identified journals are classified into 'peer reviewed' and 'not'. The results are dismal as just 154 journals (8.39%) come under the category 'peer reviewed'. About 331 journals are available online.

It should be noted that peer-review systems enable authors to enhance the quality of papers and experts put experiments/investigations in the right direction. We have the documentation of reviews of the papers submitted to a reviewed journal (unpublished data from *Journal of Digital Information Management*<sup>5</sup>), where authors of a few papers are asked to re-engineer experiments. In the absence of peer-review mechanisms, journals are likely to publish trivial content.

We are concerned with poor peer-reviewing practice of Indian journals. Indian libraries should subscribe to the reviewed journals only, so that the other journals realize the potential and value of the review system. Unless the institutions insist that their scientists and faculty members opt for publications in peer-reviewed journals and consider the publications in peer-reviewed journals only, Indian journals will continue to live in a constricted circle

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P. PICHAPPAN\* G. BUCHANDIRAN

Department of Library and Information Science,

Annamalai University, Annamalainagar 608 002, India \*e-mail: ppichappan@gmail.com