

SCIENCE AND CULTURE

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 EDITORIAL

HOW TO MAKE A BEST JOURNAL BETTER ?

Happy New Year to you all!

The beginning of a new year is something to look forward to. We start the year on a clean slate, without any prejudices of the past. We start the year with new ideas, hopes and resolutions, without knowing exactly where they will lead to with the passage of time.

Standing at this juncture, the single most ambition that comes to my mind is to make this journal at par with some of the best journals in the world. The keyword here is *journal*— it pains me immensely when I hear people referring to *Science and Culture* as a magazine. Before proceeding any further, I would like to clear some of the common misconceptions about a journal.

What are the differences between a journal and a magazine? What allows a publication to be treated as a journal and not a magazine? Why bother making any distinction, when the definitions of the terms appear to be synonymous in the Oxford English Dictionary? ‘Journal’, according to the dictionary, is ‘a newspaper or periodical’ while a magazine is ‘a periodical publication containing articles, stories etc., usually with photographs, illustrations etc.’ However, a scholarly journal is different from a magazine in many respects, starting with its contents, readership, authorship, structure and design, and also in its policy of publication. In fact, the most important characteristic of a journal is the publication of original and unpublished research articles. Magazines do not publish original research articles. Review articles (which are not necessarily original works) in a journal are always written by an expert in that field or a person with well-established credentials, with an in-depth and well-focussed

knowledge of the subject. This is because the readership of a journal is quite different from that of a magazine. Most magazines cater to a very large cross-section of readers, an ‘average’ mass, and therefore justifiably provide a broad overview of the subject. In contrast, articles published in a journal are read by professionals, researchers, scholars and persons with detailed knowledge of the subject, and therefore contents of journal articles are more focussed and typically have greater depth.

The next major difference is in the policy of publishing. All articles published in a journal (with the exception of invited articles from experts) are reviewed by experts in that subject, commonly referred to as “peer review” or “refereeing”. On the other hand, articles published in a magazine are normally reviewed by the editorial staff of the magazine. Articles in a journal are published with the name and affiliation of the author (or at least with his or her contact address), while omitting the affiliation or contact address of the author is not uncommon in magazines. The time when the editorial office receives the manuscript is displayed in an article of a journal. Some journals also display the time when the manuscript was accepted for publication. This has an important significance for original research articles in order to establish the proprietary rights in case of disputes when similar works are published independently by two different authors at a similar time.

A journal is also different in structure, design and appearance from that of a magazine. Articles in a journal are normally more structured. Although there are no hard and fast rules to follow, in general, an article in a journal contains an abstract, followed by introduction, research methods, results, analysis, and conclusion. More importantly, it contains relevant reference in the text in a ‘References’ or ‘Bibliography’ section at the end. The look and feel of journals is more professional, with plain text,

graphs and charts, as opposed to the glossy and colourfully illustrated magazines that may be strewn with commercial advertisements.

Science and Culture has all the qualities and attributes of a journal and the Editorial Board is committed to ensuring that these characteristics are maintained. In addition, *Science and Culture* publishes important articles and contemporary scientific news items from other journals and periodicals, which arguably is uncharacteristic of scholarly journals. It is true that most journals publish only original research articles and reviews. But there are exceptions, the most famous one being the journal *Nature*, which contains original research articles and reviews, as well as many other items like 'News', 'Business', 'Opinion', and policy issues. It also publishes important articles from other journals. In fact there is a striking similarity between the structure of *Science and Culture* and *Nature*, probably because Prof. M.N. Saha had the image of *Nature* in his mind when he co-established *Science and Culture* in 1935.

A journal's ultimate success lies primarily in the quality of articles, circulation, and timely publication. The articles published in *Science and Culture* have been of a very high standard. It has also now been timely published. Its circulation has increased by about 25% in the last two years and the total circulation at present is close to 900. We are working on increasing it even further. We now encourage authors to submit manuscripts in electronic form so as to cut down on 'printing errors', as well as to save time in proof correction. This also aids sending manuscripts to reviewers and getting their comments electronically. The whole process has reduced the time-lag between the submission of an article and its publication.

One of my goals is to publish an increased number of original research articles. As I stated before, the publication of original research articles (grouped under 'Research Communications' in *Science and Culture*) is one of the major attributes of a journal. I appeal this New Year to all researchers, teachers and research students to consider submitting research work in the journal, or at least to submit preliminary research investigation in this journal, and subsequently publish a more detailed paper in a professional journals for that subject. I was looking at the past issues of *Science and Culture* published in

1950s and found that a significant departure in recent issues is a decline in the number of original research articles.

What are the reasons for this decline? It is true that the number of science journals has proliferated in the last fifty years, and hence scholars have more choice in publishing their work, very often in a journal that is more relevant to their subject allowing a more focussed readership. However, there are important advantages in publishing articles in a multi-disciplinary journal—the chances of cross fertilization of ideas between diverse groups of scientists are much more. Intuitively, the

probability of obtaining research articles is inversely proportional to the number of journals appearing. This is very much true in the case of a multi-disciplinary journal. It is also true that authors are more attracted when abstracts of their articles are published in international abstract books, and we lost, our chances of publishing abstracts a long time ago, ostensibly due to irregular publication of the journal. We are trying to revive the process of including abstracts of articles published in *Science and Culture*

in the abstract book of relevant subjects, although this may be a long struggle according to the NICCAR. However, our journal is included in the Master Index of Journals of Thomson – ISI. On a more positive note, the journal has just stepped into the process of evaluation by the Thomson – ISI to be included in the current contents / abstracting service, courtesy John Hubbell of NIST (my long term colleague and well-wisher since 1972) who introduced me and the journal to Eugene Garfield, Emeritus Chairman of Thomson – ISI. In a recent communication with Eugene Garfield, I came to know that there were 96 citations of *Science and Culture* during 2002-2006 out of 328 articles (including research communications) published during the same period, which, in my opinion, is impressive.

I published my research work in *Science and Culture* for the first time in 1974. Some of my subsequent articles in *Science and Culture* were later published in other relevant journals when the work became more mature. From my experience I can vouch that publishing early results in a broad journal would help young research workers immensely in improving their work, besides grooming them in the art of writing research papers. As all manuscripts

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are reviewed by experts before they are accepted, the comments from a reviewer may in fact generate new ideas, helping improve the quality of work. In my opinion, *Science and Culture* is already one of the best journals in its category—a multidisciplinary science journal focussed on research and development in science, society and culture.

With these reflections, I ask myself what can make a great journal better, and I am convinced that it is the people. People who are authors, reviewers, editorial board members, collaborators, people at back office, publishers and printers. Authors are the people who strive to show the best of their scholarship—theirs is always a delicate dance between balancing the too basic with the too difficult. Authors constitute the mind of a journal that keeps the heart beating. The heart is made up of people who volunteer to share their valuable time and expertise by serving on the editorial board or on the review committees. These reviewers are the people who ensure that the submitted manuscript is accurate and complete.

There are also numerous people who actually produce the journal but remain firmly in the background without their names ever appearing in black and white. Although I have been holding the position of Editor-in-Chief for about

three years now, it is only but recently that I got a chance to meet some of the people who produce and print the journal. They take all the raw material and put them together into this cohesive whole. They make sure the quality of the print and the process remain intact. They work day in and day out, quietly and behind the scenes, to ensure that the journal is complete and on time. My kudos to them.

But most important of all are the readers of the journal. Without readers, all the other people are inconsequential. Readers provide us feedback on the quality of the printed articles, they tell us what information they want to see in print, and in what form. It is the Reader who determines the success of a journal, and they are the measure of our success.

I, therefore, thank each and every one of the people I mentioned, and appeal to them all to continue their valuable support of this journal – to contribute their time, effort, and expertise to make this journal even better. If, in addition to their own contributions, each person can motivate one more student or colleague to write in, they will have performed a selfless (and much appreciated) act to strengthen the future of *Science and Culture*. □

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