## COMMENTARY





## THE PUBLICATION PLETHORA

"An analysis of the Atomic Energy Project at the University of Rochester showed scientific results were being published in both open literature and in AEC technical reports . . . AEC Headquarters confirmed the adequacy of publishing only in open journals, a system preferred by the University Project. The new system of sending only preprint copies of research papers to the AEC in Washington and Oak Ridge and publishing only in open literature represents a saving of about \$28,000 per 40,000 copies."<sup>1</sup>

This statement appearing in an official AEC publication should certainly cause every taxpaying professional person to pause and ponder when it comes time to report the latest results of his work. Other government agencies also would do well to heed the AEC's recommendation.

A great many research and development reports from universities, private companies, and national laboratories are printed at the expense of a sponsor, who, more often than not, is the Federal Government. Of such reports many are unnecessary because the material either could have been or will yet be published in the open literature. Duplication of publication wastes the cost of one of the means of publication, but burying the results of research diminishes considerably the value of the work and thus wastes much of the expense of doing the research in the first place.

The point involved here is that many journals, including *Nuclear Applications*, will not knowingly republish information that has already been distributed to an extent that is not insignificant relative to the circulation of the journal. Thus, the debut of information in a printed report distributed outside the sponsoring organization frequently precludes subsequent appearance of that information in a professional journal and thereby eliminates the mutual benefits that would have accrued from this wider circulation.

The case against publishing the same material both in the open literature and in a laboratory report should be obvious. The superiority of the open literature over the laboratory report as a vehicle for publication of worthwhile material is just as strong but may not be so obvious.

In addition to the advantages of more widespread dissemination, reputable journals provide two very valuable services not offered by laboratory reports. They critically review each paper before publication, and in the letters and papers in subsequent issues they provide a forum for an additional and very broadly based critique. A good review in

<sup>&</sup>lt;sup>1</sup>Cost Reduction Abstracts, 1, No. 3, p. 4, U. S. Atomic Energy Commission (June 1967).

almost every case can assist the author to sharpen his perspective, to clarify ambiguities, to bring out hidden but important features, to streamline his writing so that the reader will not quit in frustration, and even to go back and do the experiment needed to really prove his point. Proof of this lies in the large number of letters that we have received from authors sincerely thanking us for what they regard as a genuinely helpful review—a tribute, incidentally, to our reviewers for the considerable time and effort that so many of them have contributed.

Even the claim to speedier dissemination of results by the company-printing route cannot be made in many cases. For example, we are now averaging 75 days from the receipt of the raw manuscript to dispatch of the final manuscript to the publisher, and this time includes time for review by at least three and sometimes as many as eight reviewers and time for revision by the author; to this must be added 92 days for mechanical processing, giving an average of 24 weeks from the time we first receive a manuscript until it appears in print. This is in contrast to the 22 to 30 weeks required by one of the national laboratories to print a laboratory report without review.

Automated storage and retrieval of information has a long way to go before it can be widely and generally applied to such an extent that it eliminates the need for journals. Even when such automation is perfected, some kind of primary journals providing speedy publication of important breakthroughs may be needed, and certainly there will continue a need for secondary journals of two kinds: one kind highly specialized and the other kind having a very broad interdisciplinary scope, both providing critical review and state-of-the-art articles. In the meantime, until information automation is perfected to handle all other primary reporting, primary journals will be needed in ever increasing numbers. This burgeoning need makes it mandatory that we eliminate all republishing as well as initial publication of trivia and of verbose difficult-to-comprehend material. Failure to do this will unnecessarily tax the research dollar and prohibitively burden the time that one can devote to reading, both of which are already in noticeably short supply.

As taxpaying individuals we need not tolerate waste of public funds by duplication of publication or by publication in a medium that offers relatively fewer advantages per dollar expended. We can be heard through our professional societies, and we can support their professional journals by subscribing to them and by giving them first option on publishing the results of our work.

In turn, the professional societies can demand a complete stop to the practice of duplicate publication with public funds and, by pointing out the reasons, can insist that their respective journals be given preference over in-house methods for the publication of the results of work sponsored by public funds.

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