

Precise Bibliographical Verification with the  
*Science Citation Index*®

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For many years we have been receiving reports from scientists, librarians, and information system managers that one of the most important and useful applications of the *Science Citation Index* is in precise identification of virtually any significant scientific article. Such identification is essential for interlibrary loan transactions.

Interlibrary loan comprises a large part of every library's activity. Under the American Library Association's rules, the borrowing library has the responsibility of providing an accurate identification of the requested document—a so-called “bibliographically correct” citation. The borrowing library is expected to verify the citation by looking it up in some standard reference work. Some scientific libraries perform as many as 20-30,000 verifications a year. The typical library must carefully choose from among the many available standard reference tools the most comprehensive and most economical ones to use for verification.

Increasingly, the preferred reference work for verification of scientific and technical articles is the *Science Citation Index*. Verification is successfully achieved with the *SCI*® in almost every case because of (1) its multidisciplinary coverage, (2) its yearly coverage of more than 350,000 source items

which generate 4,000,000 citations to 2,000,000 unique articles, and (3) its retrospective coverage dating back to the earliest known scientific works.

In a study decisively confirming the superiority of the *SCI* as the librarian's best verification tool, Pings and Williams have comparatively evaluated the efficiency and cost-benefits of various standard library reference works.<sup>1</sup> They compared the relative verification effectiveness of six major reference tools in their ability to validate and identify a randomly selected sample of 265 article citations. Of the six reference tools studied, *only the SCI was able to verify 100% of the sample. Excerpta Medica was next in effectiveness (65%); Cumulated Index Medicus was third (55%).*

The study concludes, “. . . as an instrument to identify the existence of a document, [*the SCI*] *clearly outclasses all other instruments singly or collectively since all citations . . . were identified.* If the sole use of any of these bibliographic instruments were for verification, *then the purchase of a complete file of SCI for \$5,350 would indeed be the best investment for this purpose.*” (Italics mine.)

Although this study was performed on behalf of biomedical libraries in

hospitals, *SCI* is equally effective in verifying scientific articles in all other disciplines. For instance, in one of the great physical science and engineering libraries, the *SCI* is the reference tool of choice in verifying over 35,000 citations a year.<sup>2</sup>

The Wayne State study conclusively

confirms the economy and indispensability of the *Science Citation Index* for citation verification. When you add to this capability *SCI*'s unparalleled speed and efficiency in literature searching,<sup>3</sup> there is no doubt that it is truly the "best investment" for the modern scientific library.

1. Williams, J.F. & Pings, V.M. "A study of the access to the scholarly record from a hospital health science core collection." Report No. 54, Wayne State University, School of Medicine, Library & Biomedical Information Service Center, Detroit, Michigan. January 1970. 23 pp.
2. Casper, R. Milikan Library, California Institute of Technology. Personal Communication, January 1970.
3. Spencer, C.C. Subject searching with *Science Citation Index*; preparation of a drug bibliography using *Chemical Abstracts*, *Index Medicus*, and *Science Citation Index* 1961 and 1964. *American Documentation* 18(2):87-96 (1967).