

BLIND SPOT IN SCIENTIFIC RESEARCH EXPENDITURE

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Availability for general use of the results of research is a frequently overlooked or underestimated essential among the objectives of scientific inquiry. Provision of research funds for doing the investigational work is generous. Often tragically inadequate is provision for systematically recording the new information obtained and for keying it to serve further progress effectively. As a matter of purposeful allocation and administration of research funds a way should be found to round out undertakings for full utility. Stopping short tends to defeat the most significant factor for progress.

Stopping short--this is perhaps usually not recognized as occurring. It has been customary for individual scientists through their professional organizations (dues and subscriptions) plus libraries and other subscribers to finance much of the recording and keying of new scientific information. Too often it is taken for granted that they can continue to do this adequately. With research booming, individual scientists and hard-pressed libraries cannot carry the giant's share of the load. There are billions for research, inadequate millions for storing the valuable product.

What does it avail to build mountains of information if much of the new knowledge is not filed effectively? Too often a scientist who could use the new information for application or further scientific progress is without effective means of learning all that other research workers in his field have accomplished. Is it wise to build a magnificent and potentially useful structure filled with urgently needed treasure and then not provide for adequate approaches, enough doors, and unlocked rooms?

It is recognized that in competitive industry a considerable degree of secrecy is reasonable and that some information learned in governmental laboratories must be classified. Even so, industrial secrecy and national classification probably go further than farseeing wisdom would dictate. However, the purpose here is not to plead for the overcoming of reluctance to publish, but rather to seek a realistic attitude toward the support of both primary and secondary publication of scientific information freely intended for general use, as most is.

Too many scientific journals publishing original papers are unable to do their best in

the face of the great surge of research. Too often papers must be turned down, delayed, or cut too strenuously. Abstracting and indexing journals also are struggling. Some cannot cover their respective fields completely. Some find full and effective indexing too expensive. A few scientific fields are not served at all by abstracts and indexes, still the most effective method of making information available.

With Chemical Abstracts in the picture chemists are said to fare better as to availability of needed information than do other scientists, but CA, still approaching completeness of coverage, has its struggles. Indexing delays have occurred in a period of prolonged rapid growth in world-wide chemical research, and full usefulness through wide distribution has been threatened because of the necessity of increased subscription prices.

It is possible that there has been some lag in the support of abstracting and indexing services because of enthusiastic hope for better methods of gaining needed information by means of mechanized procedures. Abstracts and indexes have been referred to as constituting an obsolete method. No method is obsolete until a better method has been found. The effort to use machines for literature searching is eminently to be commended and encouraged. CA is constantly seeking better methods. Some purposes are being served already in this mechanical manner and others will follow, but it is the considered opinion of many well-informed documentalists that abstracts and indexes will continue to be needed for a long time, perhaps indefinitely, along with expensive machines that will serve special purposes in the larger institutions. Abstract journals should not suffer for support till they are effectively replaced.

It will be difficult to find effective plans for making research funds encompass provision for real availability of the results obtained. Difficulty should not block accomplishment. Page charges from research funds now pay in part for some primary publication. Recognition of the shortsightedness of neglect of the working procedures for realizing availability is urgent. Such recognition will surely stimulate the finding of ways to make research funds stretch far enough truly to fulfill their whole purpose.

In these days of booming research, abstract journals have a growing task which presents many problems. But this is no time to falter. The need for such services grows with their

task. After all, the cost of availability is but a tiny fraction of the cost of research. Not tiny at all is the utility of availability of scientific information.

SYMPOSIUM ON DOCUMENTATION AND SCIENTIFIC INFORMATION IN CHEMISTRY, Milan, Italy,
November 9-10, 1961

Sponsored by the IUPAC, the Federation of Scientific and Technical Societies of Milan, and the Lombardy Section of the Italian Chemical Society, and organized by the French Center of Technical Documentation and Exchange, the symposium will tentatively cover:

(1) Publication of Literature

Status of the publication of chemical literature; methods of improvement. New methods of publication. Gaps in the chemical literature in certain languages. The translation problem.

(2) Documentation and Information Services

Status of these services (public and private) in the various countries; cooperation among them. Methods used for collecting, using, and distributing literature; improvement of methods. Availability of literature.

(3) Current and Retrospective Literature Reference Services

Status of chemical literature reference services and their possible progress. Cooperation among literature reference services. Questions on status reports. New types of literature reference services, e.g., Chemical Titles.

(4) Automation of Information Retrieval

Exposition of experiments, in progress or projected, on automatic coding of data, selection of literature, and information retrieval, with machines or electronic computers. Linguistic, semantic, and machine construction problems that must be faced.

Attendance will be limited by invitation to 50 or 60, except for the opening session, which will be public. Texts of papers or communications must be in the secretary's hands (Mr. Luigi Satta, 18 via Turati, Milan) by August 31 for distribution to participants before the meeting.