### ISI Directory of R&D Scientists

A new directory which provides a reasonably current address of tens of thousands of scientists and engineers who publish technical papers every year will be available in July 1968. Titled the *International Directory of Research and Development Scientists*, it is being published by the Institute for Scientific Information, Philadelphia.

The main part of the Directory consists of an alphabetical listing of some 125,000 names and addresses of key R&D personnel. IDRDS makes it easier for scientists to quickly locate the addresses and affiliations of those active in research. A Geographic Index enables users of the Directory to locate scientists by country/state/city. An Organizational Index helps the user locate individuals in a particular company or research lab who have published papers.

Compiled from the Author Indexes and Address Directories of CURRENT CONTENTS services, the *International Directory of Research and Development Scientists* will be revised and published annually.

Regular price of the International Directory of Research and Development Scientists is \$60.00. An introductory offer is now in effect for \$47.50 from the Institute for Scientific Information, 325 Chestnut St., Philadelphia, Pa. 19106

### The Document Image Code System

Part of the program of the NBS Office of Standard Reference Data is the development of a General Purpose Scientific Document Image Code (GPSDIC) system. The purpose of a GPSDIC system is to relieve the scientist of the chore of changing his notations to meet arbitrary restraints imposed by machine processing. Such a system has been designed and is currently under development at the Bureau. The design and development of this system is being carried out by Blanton C. Duncan and David Garvin of the Bureau's Physical Chemistry Division in conjunction with the Chemical Thermodynamic Data Group and the Chemical Kinetics Information Center, both of which are at NBS. As designed, the system permits a scientific typescript, with all its complex symbolism and highly structured page format, to be transferred to digital machine form with virtually no limitations on the notations employed.

The system was designed to assure broad applicability by emphasizing: (a) exchange of information via telecommunications devices compatible with the USA Standard Code for Information Interchange (USASCII), (b) design of hardware to permit the use of the proven skills of ordinary scientific typists in the record capture process, (c) exploitation of the capabilities of commercially available extended character high-speed line printers for direct computer output, and (d) publication using this type of machine record as the "typescript" input to computerized typesetting programs.

## Information Bazaar

The Sixth Annual National Information Retrieval Colloquium will be held in Philadelphia in May 1969. Information Bazaar is the theme of the colloquium.

### **BOOK REVIEWS**

Structural Group Index of Commercial Organic Chemicals. 160 pp. Compiled and published by Chemical Systems, Inc., P.O. Box 5523, Southfield Station, Shreveport, La. 71105, 1968.

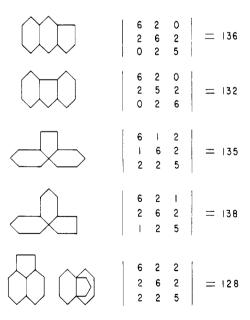
Over 3400 commercial organic chemicals are listed under as many functionalities as present in each chemical. Thus, a chloronitrophenol is listed under Nitro, Halogen, and Alcohol; aniline is listed under Amine and Salt. The approximately 3400 chemicals comprise a total list of about 5400 under 53 functional groups. Suppliers are not listed; they are available as well as computer correlations for a charge from the publisher.

# LETTER TO THE EDITOR

# Dear Dr. Skolnik:

I continue working on a program to find similarities in ring systems (I hope to submit this work for your consideration in due course).

Recently I stumbled upon something which I propose to call "Ring-Incidence Matrix;" for a ring system with n rings this is a symmetric  $n \times n$  matrix R, whose elements  $r_{ij}$  are defined as the number of rings common to the  $i^{th}$  ring and the  $j^{th}$  ring and the elements on the main diagonal,  $r_{ii}$ , as the size of the  $i^{th}$  ring. The determinant of this matrix does not depend upon the order in which the rings are enumerated and has an unique value for each ring system (the converse is not necessarily true, see last example). The matrix and its determinant can be conveniently calculated from topological structure representations and could be used to advantage—e.g., as sieves in structure matching and substructure searching.



Please publish the essence of this letter in order to bring this useful technique to the notice of the structure retrieving community and/or to avoid duplication of effort.

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