

PN - AAP - 080  
ISN 33054

A SELECTED LIST  
OF SCIENCE AND TECHNOLOGY  
REFERENCE BOOKS, ABSTRACTS,  
AND INDEXES PREPARED  
FOR THE  
ARAB REPUBLIC OF EGYPT

Submitted by:

King Research, Inc.  
6000 Executive Boulevard  
Rockville, Maryland 20852

Under Subcontract to:

The Georgia Tech Research Institute  
Georgia Institute of Technology  
Atlanta, Georgia 30332

Submitted in response to National Science  
Foundation Contract NSF-INT 7924187

July 1980

NOTE: None of the annotative information included in this volume is the work of King Research, Inc. All annotations supplied were extracted from bibliographic sources listed herein.

## INTRODUCTION

This volume represents a core list of science and technology reference books, abstracts, and indexing publications. For this compilation, titles of English-language books only have been included, with heavy American emphasis. No obvious attempt has been made to present only the "best" of the sources available. Rather, in many cases, they are merely representative of their type. Because scientific and technical information must be up-to-date, the primary criterion for inclusion is that the reference be a current source of information. Therefore, few titles published prior to 1965 have been included.

The primary areas addressed in this volume are divided into four sections: biological sciences (biology, botany, zoology, and entomology), physical sciences (physics, chemistry, earth sciences, and astronomy), mathematical sciences (mathematics, statistics, and computer science), and a final section on urban planning, development and transportation. The physical, biological and mathematical sciences are generally referred to as the "pure" sciences. Together, these sciences provide the necessary base that interacts with agriculture, engineering, medicine and other disciplines in ways to benefit mankind and the environment. We have attempted in this volume to provide basic coverage of these sciences and their subfields. The section on urban planning, development and transportation was included in this volume in consideration of Egypt's pressing urbanization problems. As with other developing countries, Egypt has experienced a rapid growth of population and excessive migration to cities, resulting in a high degree of overurbanization.<sup>1</sup> This has led Egypt to concentrate on problems of urban development, including development of smaller cities to relieve overconcentration in Cairo and Alexandria. Books in the urban planning section also address urban transportation, as well as transportation in general. This, however, does not account for other transportation problem areas. For example, many of Egypt's existing railroads and roads were built during the two world wars and earlier, and are no longer adequate to meet the needs of current day use.<sup>2</sup> Books concerned with roads and railroads, and other transportation needs are found under civil engineering in the engineering

---

<sup>1</sup>Richard F. Nyrop. Area Handbook for Egypt. Washington, D.C.: American University, 1976.

<sup>2</sup>Ibid.

core list. We would like to point out here that the boundary lines between different branches of science and technology are becoming ever more blurred. Therefore, classifications included in this list are not mutually exclusive, but frequently overlap with each other and with other disciplines such as engineering, medicine, and agriculture, including the social sciences. For example, there are general ecology works which would be considered important sources in any of these fields. We therefore strongly encourage that the core lists on agriculture, engineering, and medicine and public health also be consulted, especially for identifying relevant secondary publications. We would also like to emphasize here that the goal of this and the other core lists is not to present a comprehensive, overall picture of scientific and technical literature. Rather, our goal is to provide a quantitative method whereby individual library collections can be checked against a reliable list generated from well-known sources of evaluative and/or descriptive bibliographic information. The coverage statistics which are observed will then be used as an input to determining costs for individual libraries to fill the gaps between what is relevant and held and what is relevant and not held.

This list is divided into reference books and abstracting and indexing publications. When appropriate, reference books are divided by type of material, such as handbooks, dictionaries, encyclopedias, and textbooks. Reference books which are listed under the category "Books" are loosely defined as any book that is likely to be consulted for factual information more frequently than it will be picked up and read through in sequential order. Entries within each division or subdivision are arranged alphabetically by title, except in some cases where the order has been disrupted due to additions or substitutions. Book entries contain basic bibliographic information, while the secondary source entries contain annotative information about scope and coverage.

The most fundamental reference tools used for identifying reference books were the guides, bibliographies, and bibliographic essays to the literature. Such lists were particularly valuable in that they were compiled by science bibliographers, librarians with subject expertise, or other subject specialists within specific scientific disciplines. The reference sources used are listed on the next page.

14

- A Basic Collection for Scientific and Technical Libraries.  
Effie B. Lunsford and Theodore J. Kopkin. New York: Special Libraries Association, 1971.
- Books for College Libraries. Volume V: Psychology, Science, Technology.  
2nd ed. Chicago: American Library Association, 1975.
- "Current Reference Sources in Chemistry."  
Arthur Antony. Reference Services Review 7:2:13-24 (April/June 1979).
- "Reference Sources in Botany."  
Elizabeth B. Davis. Reference Services Review. 7:1:7-14 (January/ March 1979).
- Reference Sources in Science and Technology.  
Earl James Lasworth. Metuchen, New Jersey: Scarecrow Press, 1972.
- "Sci/Tech Reference Review."  
Alfred Hodina and Arthur Anthony. Reference Services Review. 4:2:63-66 (April/June 1976).
- "Sci/Tech Reference Review."  
Alfred Hodina and Arthur Anthony. Reference Services Review. 3:2:41-45 (July/December 1975).
- Science and Technology: An Introduction to the Literature.  
Dennis Grogan. Hamden, Connecticut: Linnet Books, 1976.
- Scientific and Technical Information Sources.  
Ching-Chih Chen. Cambridge, Massachusetts: MIT Press, 1972.
- Scientific Engineering and Medical Societies Publications in Print; 1978-1979. James M. Kyed and James M. Matarazzo. New York: R.R. Bowker Company, 1979.
- "State of the Art Survey of Reference Sources in Biology."  
Reference Services Review. 6:4:17-23 (October/December 1978).
- "State of the Art Survey of Reference Sources in Chemistry."  
Arthur Antony. Reference Services Review. 7:2:13-24 (April/June 1979).  
6:2:41-47 (April/June 1978). 5:2:9-15 (April/June 1977).
- "State of the Art Survey of Reference Sources in Geology."  
David D. Ginsburg. Reference Services Review. 5:3:11-17 (July/September 1977).
- "State of the Art Survey of Reference Materials in Physics and Astronomy."  
Jack W. Weigel. Reference Services Review. 6:3:21-24 (July/September 1978).
- "State of the Art Survey of Reference Materials in Physics and Astronomy."  
Jack W. Weigel. Reference Services Review. 5:2:17-18. (April/June 1977).

- "State of the Art Survey of Reference Materials in the Biological Sciences."  
Susan Ardis. Reference Services Review. 5:2:5-8 (April/June 1977).
- The Use of Economics Literature.  
John Fletcher, editor. Connecticut: Archon Books, 1971.
- University Science and Engineering Libraries: Their Operation, Collections and Facilities. Ellis Mount. Westport, Connecticut: Greenwood Press, 1975.
- Use of Chemical Literature.  
R.T. Bottle, editor. Boston, Massachusetts: Butterworths, 1979.
- Use of Physics Literature.  
Herbert Coblans, editor. Boston: Butterworths, 1975.
- Use of Earth Sciences Literature.  
D.N. Wood, editor. Connecticut: Archon Books, 1973.
- Walford's Guide to Reference Material. Volume I: Science and Technology.  
Fourth edition. Edited by A.J. Walford. London: The Library Association 1980.

Other sources used to supplement the above lists include Technical Book Review Index<sup>1</sup>, Reference Sources<sup>2</sup>, Scientific and Technical Books in Print<sup>3</sup>, and Choice<sup>4</sup>. Items in the enclosed list which were not extracted from a published core list or evaluative reference tool are so indicated by a single asterisk (\*).

<sup>1</sup>Technical Book Review Index. Special Libraries Association, New York: 1935- Monthly. Printed excerpts from reviews in scientific, technical, medical and trade journals. Probably the best source of information for the evaluation of S&T books.

<sup>2</sup>Reference Sources. Linda Mark. Ann Arbor, Michigan: Pierian Press, 1977 - Annual. Annual cumulation of books and reference books reviewed in Reference Services Review.

<sup>3</sup>Scientific and Technical Books in Print, 1980. New York: R.R. Bowker Company, 1979.

<sup>4</sup>Choice. Middleton, Connecticut, 1965 - Monthly. Book selection journal of "best books" in science and technology, humanities, social sciences, etc.

Vi

### INSTRUCTIONS

The purpose of this list is to help you assess the completeness of your reference collection. For each book and secondary source on the list, we need to know if the item is relevant (desireable) or not relevant (not desireable) to your collection or your library users' needs. If a title is relevant, please write the code "1" in the box adjacent to it if it is in your collection. Please write a "2" if the item is relevant, but is not in your collection. If the item is not relevant, please write the code "3" in the box adjacent to it.

**BIOLOGICAL REFERENCE  
BOOKS**

## BIOLOGY

### BOOKS

1. A Classification of living animals. 2nd ed.  
Lord Rothschild. London, Longmans, 1965. [vi], 134 p.
2. A Source-Book of Biological Names and Terms. 3rd ed.  
Edmund Carroll Jaeger. Springfield, Ill., Thomas, 1955. 317 p. illus.
3. Advances in applied microbiology.  
New York & London, Academic Press, 1959-. v.1-. (v. 23, 1978).
4. Advances in enzymology and related areas of molecular biology.  
New York, Wiley: Interscience, 1941-. v.1-. (v.46, 1978).
5. Advances in genetics.  
New York & London, Academic Press, 1947-. v.1-. illus. tables. Annual.  
(v. 19, 1977. \$44.50).
6. Advances in parasitology.  
New York & London, Academic Press, 1963-. v.1-. illus., diags., tables.  
(v.15, 1977. \$36.10).
7. Advances in virus research.  
New York & London, Academic Press, 1963-. v.1-. (v.21, 1977. \$29.50).
8. Atlas of the living resources of the sea. 3rd ed.  
Food and Agriculture Organization. Rome, FAO, 1972. vii, 20 p. maps.  
£ 4.80. In English, French and Spanish eds.
9. Basic anatomy; a laboratory manual.  
B.L. Allen. San Francisco, W.H. Freeman, c1970.
10. Biological Science. 3rd ed.  
William T. Keeton. W.W. Norton and Co. New York, 1980.
11. Biological stains: a handbook on the nature and uses of the dyes employed in the biological laboratory. 8th ed. H.J. Conn, and others. revised with the assistance of E.H. Stotz [and others]... Baltimore, Md., Williams & Wilkins Co., 1969. xii, 498 p. diags. tables.
12. Biology Data Book. 2nd ed.  
Philip L. Altman and Dorothy S. Dittmer, comps. and eds. Bethesda, Md., Federation of American Societies for Experimental Biology. 1972-1974. 3v. index.
13. Cell Biology; A Comprehensive Treatise.  
edited by L. Goldstein and D.M. Prescott. New York, Academic Press, 1977-. v. 1-. v. 1: 77-74026, 0-12-289501-0. 435 p. \$30.15/volume.
14. Current advances in genetics.  
Oxford, etc., Pergamon Press, 1976-. v.1-. Monthly.
15. Experiments and techniques in parasitology.  
Austin J. MacInnis. San Francisco, Freeman, c1970.

BIOLOGY (Cont'd)

BOOKS (Cont'd)

16. Genetics. 2nd ed.  
Monroe W. Strickberger. Macmillan. New York, 1976.
17. Identification methods for microbiologists.  
Brian M. Gibbs & Frederick A. Skinner, eds. New York, Academic.
18. Introduction to biogeography.  
B. Seddon. London, Duckworth, 1971. viii, 220 p. illus., tables, maps.
19. Larousse science of life: a study of biology, sex, genetics, heredity and evolution. by Jean Rostand and Andree Tetry. London, etc., Hamly, 1971. 475 p. illus., tables.
20. Methods in microbiology.  
Edited by J.R. Norris and D.W. Ribbons. New York & London, Academic Press, 1969-., v.1-, illus., diags., tables. (v.9, 1976. \$19.75).
21. Microbiology. 2nd ed.  
Bernard D. Davis and others. Harper and Row. Maryland, 1973.
22. Microbiology. 13th ed.  
H. Zisser. New York, Appleton-Century-Croft, 1964. 1214 p. illus. tables.
23. Mosses with Hand Lens and Microscope.  
Abel Joel Grout. Ashton, Md., Lundberg, 1972 (c. 1903). 416 p. illus.
24. Plant and animal biology. 4th ed.  
A.E. Vines and N. Rees. London, Pitman, 1972. 2v. (x, 1345 p.; x, 1092 p.).  
illus., diags., tables.
25. Principles of Biogeography.  
David Watts. New York, McGraw-Hill, 1971. 401 p. illus., maps. index.  
(McGraw-Hill Series in Geography).
26. Protozoology. 5th edition. 3rd Printing.  
Richard R. Kudo. Charles C. Thomas, Publisher, 1977.
27. Statistical Tables.  
James F. Rohlf and Robert R. Sokal. San Francisco, Freeman. 1969. 353 p.  
illus.
28. Statistical Tables for Biological, Agricultural and Medical Research. 6th ed.  
Ronald Aylmer Fisher and Frank Yates. rev. New York, Hafner, 1974. 146 p.
29. Statistics for the biological sciences.  
William C. Scheffler. Reading, Mass., Addison, 1969.
30. The cell: biochemistry, physiology, morphology.  
J. Brachet and A.E. Mirsky. New York & London, Academic Press, 1959-64.  
6 v. illus., graphs.
31. The Enzymes. 3rd ed.  
P.D. Boyer, ed. New York, Academic Press, 1970-1973. 9 v.

BIOLOGY (Cont'd)

BOOKS (Cont'd)

32. The open sea: its natural history.  
Sir A.C. Hardy. London, Collins, 1970-71. 2 v. illus. (New naturalist series.)
33. The Penguin book of the natural world.  
Co-ordinating editors: S. Larkin, L. Bernbaum. Marmondsworth, Middlesex, Penguin Books, 1976. [x], 320, [21] p. illus. 1.95

DICTIONARIES

34. A dictionary of biological terms: pronunciation, derivation and definition of terms in biology, botany, zoology, anatomy, cytology, genetics, embryology, physiology. 8th ed. I.F. Henderson and W.D. Henderson. ed. by J.H. Kenneth. Edinburgh & London, Oliver & Boyd, 1963. xvi, 640 p. (Reprinted Longman, 1975. £6.25).
35. A Dictionary of Biology. 6th ed.  
Michael C.J. Hickman Abercrombie and M.L. Johnson. Baltimore, Penguin Books, 1973. 309 p.
36. A dictionary of genetics. 2nd ed. rev.  
R.C. King. London, Oxford Univ. Press, 1974. [vii], 375 p. diags., graphs, tables. (3rd rev. ed. 1976. 384 p. £5).
37. A Dictionary of Microbial Taxonomic Usage.  
Samuel Tertius Cowan. Edinburgh, Oliver and Boyd, 1968. 118 p.
38. A Science dictionary of the animal world.  
Michael Chinery. New York, Watts, 1969, c1966.
39. Dictionary of Biological Terms. 8th ed.  
Isabelle Ferguson Henderson and W.D. Henderson. Edinburgh, Oliver and Boyd, 1963. 640 p.
40. Dictionary of biology: English, German, French, Spanish.  
G. Haensch and De Anton G. Haberkamp. Amsterdam, Oxford, New York, Elsevier, 1976. xii, 483 p. £33.60.
41. Dictionary of Comparative Pathology and Experimental Biology.  
Robert W. Leader and Isabel Leader. Philadelphia, W.B. Saunders, 1971. 238 p. bibliog.
42. Dictionary of the Biological Sciences.  
Peter Gray. New York, Reinhold, 1967. 602 p.
43. Glossary of genetics and cytogenetics, classical and molecular.  
R. Rieger and others. 4th completely rev. ed. Berlin, New York, etc., Springer-Verlag, 1976. 647 p. illus., tables. \$14.30.
44. McGraw-Hill dictionary of the life sciences.  
D.N. Lapedes, editor-in-chief. New York, London, etc., McGraw-Hill, 1976. xiv, 903, 38 p. illus., diags., tables. \$19.95.

BIOLOGY (Cont'd)

DICTIONARIES (Cont'd)

45. The dictionary of the biological sciences.  
P. Gray. New York, London, Reinhold, 1967. xx, 602 p.
46. The Fern dictionary.  
Los Angeles, Los Angeles International Fern Society, 1977. 132 p.
47. The Penguin dictionary of biology.  
M. Abercombe and others. London, Allen Lane, 1977. 311 p. £3.95.

ENCYLOPAEDIAS

48. Cowles encyclopedia of animals and plants.  
New York, Cowles, 1968.
49. Encyclopedia of the biological sciences. 2nd ed.  
Peter Gray, ed. Van Nostrand-Reinhold, 1970.
50. Grzimek's Encyclopedia of evolution.  
B. Grzimek's, ed. New York, London, etc., Van Nostrand Reinhold, 1976.  
562 p. illus. (some col.), tables. \$39.50.
51. The Encyclopedia of Biochemistry.  
Roger John Williams and Edwin M. Lansford. New York, Reinhold, 1967.  
876 p. tables.
52. The Encyclopedia of the Biological Sciences. 2nd ed..  
Peter Gray, ed. New York, Van Nostrand, 1970. 1027 p. illus. map.  
tab. bibliog. index.
53. The pictorial encyclopedia of the evolution of man.  
J. Jelinek. London, Hamlyn, 1975. 552 p. illus. £2.95.

HANDBOOKS

54. A guide to the study of fresh-water biology. 5th ed.  
J.G. Needham and P.R. Needham. rev. and enl. San Francisco, Holden-Day,  
Inc., London, Constable, 1962. x, 107 p.
55. A Guidebook to Biochemistry: A New Edition of a Guidebook to Biochemistry  
by K. Harrison. New edition. Michael Yudkin and Robin Offord. New York,  
Cambridge University Press, 1971. 195 p. illus. index.
56. A handbook on evolution. 4th ed.  
British Museum (Natural History). London, Trustees of the British Museum,  
1970. xii, 130 p. illus.

BIOLOGY (Cont'd)

HANDBOOKS (Cont'd)

57. Biological Stains: A Handbook on the Nature and Uses of the Dyes Employed in the Biological Laboratory. 8th ed. Harold Joel Conn. Baltimore, Williams and Wilkins, 1969. 498 p. diags. tables.
58. Bergey's Manual of Determinative Bacteriology. Ed. by Robert E. Buchanan and Norman E. Gibbons. 8th ed. Baltimore, Williams and Wilkins, 1974. 1272 p. Society of American Bacteriologists.
59. Biological Research Method: A Practical Guide. 2nd ed. H.H. Holman. New York, Hafner, 1969. 280 p. illus.
60. CRC Handbook of biochemistry: selected data for molecular biology. 2nd ed. H.A. Sober, ed. Cleveland, Ohio, Chemical Rubber Co., 1970, v.p. tables. (3rd ed. 1976).
61. Electron Microscopy: A Handbook for Biologists. 3rd ed., rev. and exp. E.H. Mercer and M.S.C. Birbeck. London, Blackwell Scientific Publications: distr. Philadelphia, F.A. Davis, 1972, 145 p. illus. bibliog. index.
62. Enzyme handbook. T.E. Barman. Berlin, Heidelberg, New York, Springer-Verlag, 1969. 2 v. (928 p.).
63. Handbook of bacteriological techniques. 2nd ed. Francis J. Baker. New York, Appleton, 1967.
64. Handbook of Biochemistry: Selected Data for Molecular Biology. 2nd ed. Herbert A. Sober, ed. Cleveland, Ohio, Chemical Rubber Company, 1970. 1v. (various paging). tables.
65. Handbook of cell & organ culture. Donald J. Merchant, et al. Minneapolis, Burgess, 1964.
66. Handbook of Microbiology. Allen I. Laskin and Hubert A. Lechevalier, eds. Cleveland, CRC Press, 1973-1974. 4 v. Vol. 1, Organismic microbiology.
67. Handbook of Micromethods for the Biological Sciences. Georg Keleti and William H. Lederer. New York, Van Nostrand Reinhold, 1974. 166 p. illus. index.
68. Handbook of Mutagenicity Test Procedures. edited by B.J. Kilbey et al. Amsterdam, Elsevier Scientific Publishing Co., 1977. 485 p. 77-22531. 0-444-41338-3. \$59.95.
69. Handbook of Teratology. edited by James G. Wilson and F. Clark Fraser. New York, Plenum, 1977-. v. 1-4. v. 1: 76-41787. 0-306-36241-4. \$54.00/volume.
70. Manual for the classification and determination of the anaerobic bacteria. Andre R. Prevot. Tr. by Fredette, V. Philadelphia, Lea & Febiger, 1966.

BIOLOGY (Cont'd)

HANDBOOKS (Cont'd)

71. Manual of field biology and ecology.  
Allen H. Benton & William E. Werner. Minneapolis, Burgess, 1965.
72. Manual on Radiation Sterilization of Medical and Biological Materials.  
International Atomic Energy Agency. Vienna, the Agency; distr. New York,  
Unipub, 1973. 328 p. illus. index. (Technical Reports Series, no. 149).
73. Microbiology Laboratory manual and workbook. 2nd ed.  
Alice Lorraine Smith. St. Louis, MO., Mosby, 1970.
74. Use of the microscope; an introduction handbook for biologists.  
Peter Gray. New York, McGraw-Hill, 1967.

ATLAS

75. A botanical atlas; with translation into English by H. Gilbert-Carter.  
O. Hagerup and V.A. Petersson. Copenhagen, Munksgaard, 1959-60. 2 v.  
illus.
76. Atlas of Plant Life.  
Herbert Edlin. New York, John Day, 1973. 128 p. index.

BOOKS

77. Anatomy of the dicotyledons; leaves, stem and wood in relation to taxonomy,  
with notes on economic uses. C.R. Metcalfe and L. Chalk, and others.  
Oxford, Clarendon Press, 1950. 2v. illus., pl., diagrs., tables. £21.
78. Anatomy of the monocotyledons.  
C.R. Metcalfe, and others. Oxford, Clarendon Press, 1960-. v.1-.  
illus., pl., tables.
79. Arachnida. 2nd ed.  
T. Savory. London, New York, etc., Academic Press, 1977. [xi], 340 p.  
illus., tables. £10.80.
80. Botany. 5th ed.  
Carl L. Wilson, Walter E. Loomis and Taylor A. Steeves. Holt Rinehart  
and Winston, Inc. 1971.
81. Botany: Plants Affecting Man's Health.  
New York, Wiley Interscience, 1977. 624 p. ISBN 0-471-53320-3.
82. Foraminifera.  
R.H. Hedley and C.G. Adams, eds. New York & London, Academic Press,  
1974-. v.1-. (v.2. 1977. £10.50).
83. Gray's Manual of Botany.  
M.L. Fernald. 8th edition. D. Van Nostrand. New York, 1970.
84. Lexicon of botany: English, French, Arabic.  
League of Arab States. Education, Culture and Sciences Organisation.  
Rabat. 1971. 172, xxvii p.
85. Living Plants of the World.  
Lorus Milne and Margery Milne. London, Nelson, 1967. 336 p. illus.
86. Living Trees of the World.  
T.H. Everett. London, Thames and Hudson, 1969. 315 p. illus.
87. Morphologic Encyclopedia of Palynology.  
Gerhard Otto Wilhelm Kremp. Tucson, University of Arizona Press, 1968.  
263 p. illus. (Program in Geochronology, Contribution No. 100).
88. Plants of the World.  
H.C.D. de Wit. Tr. by A.J. Pomerans. New York, Dutton, 1966-1969.  
3 v. illus.
89. Plant Propagation Principles and Practices. 3rd ed.  
Hudson T. Hartmann and Dale E. Kester. Prentice Hall. New Jersey, 1975.

## BOTANY (Cont'd)

### BOOKS (Cont'd)

90. Potter's New enclopaedia of botanical drugs and properties. 7th ed.  
R.C. Wren. Re-edited and enl. by R.W. Wren. London, Pitman and Potter  
& Clark, 1956. xv, 400 p. illus. £5.95.
91. Seed Identification Manual.  
Alexander Campbell Martin and William D. Barkley. Berkeley, Los Angeles,  
University of California Press, c. 1961. 1973. 221 p. illus.
92. Strasburger's Textbook of botany.  
E. Strasburger. Rewritten by Dietrich von Denffer [and others]. New  
English ed., translated from the 30th German ed. by Peter Bell and David  
Coombe. London, Longman, 1976. xvi, 877 p. illus., diagrs., tables, maps.  
£12.50.
93. The algae. 2nd ed.  
V.J. Chapman and D.J. Chapman. London, Macmillan, 1973. xiv, 497 p.  
illus.
94. The families of flowering plants. 2nd ed.  
J. Hutchinson. Oxford, Clarendon Press, 1959. 2v. illus., tables, maps.  
(3rd ed. 1973. 2v. (xix, 968 p.)). £19.50, the set).
95. The Oxford book of flowerless plants: ferns, fungi, mosses and liverworts,  
lichens and seaweeds. By E.H. Brightman. Illustrations by B.E. Nicholson.  
London, Oxford Univ. Press, 1966. viii, 208 p. illus.
96. Weeds of the world; biology and control.  
Lawrence J. King. v. 1, New York, Wiley, 1966.

### DICTIONARIES

97. A dictionary of botany, including terms used in biochemistry, soil science  
and statistics. G.A. Usher. London, Constable, 1966. v, 404 p. £5.50.
98. A dictionary of mosses: an alphabetical listing of genera..., together  
with a systematic arrangement of the families of mosses and a catalogue  
of family names. M.R. Crosby and R.E. Magill. St. Louis, Missouri,  
Missouri Botanical Garden, 1977. vii, 43 p.
99. A dictionary of the flowering plants and ferns. 8th ed.  
J.C. Willis. revised by H.K. Airy Shaw. Cambridge, Univ. Press, 1973.  
xxii, 1245, lxvi p. £18.
100. A Dictionary of Useful and Everyday Plants and Their Common Names; Based on  
Material Contained in J.C. Willis: A Dictionary of the Flowering Plants and  
Ferns. (6th edition, 1931). F.N. Howes. New York, Cambridge University  
Press, 1974. 290 p.

BOTANY (Cont'd)

DICTIONARIES (Cont'd)

101. A glossary of botanic terms, with their derivation and accent.  
B.D. Jackson. 4th ed., rev. and enl. London, Duckworth, 1928. x, [ii],  
481 p. £4.24.
102. A Glossary of Mycology.  
Walter H. Snell and Ester A. Dick. rev. ed. Cambridge, Mass., Harvard  
University Press, 1971. 181 p. illus. bibliog.
103. A glossary of nematological terms.  
F.E. Caveness. Ibadan, Nigeria, the Author, 1964. 68, [15] p. illus.
104. A Science Dictionary of the Plant World.  
Michael Chinery. New York, Watts, 1969. 264 p. illus. (part col.).
105. Ainsworth & Bisby's Dictionary of the fungi. 6th ed.  
G.C. Ainsworth. Including the lichens, by P.W.
106. Annotated glossary of botanical nomenclature.  
Rogers McVaugh, et al. New York. S-H Service Agency, 1968.
107. Collegiate Dictionary of Botany.  
Delbert Swartz. New York, Ronald Press, 1971. 520 p.
108. Diccionario de la terminologia de plancton marine en cinco idiomas: ingles,  
espanol, aleman, frances y ruso. E. Boltovskoy. Buenos Aires, Republica  
Argentina, Secretaria de Marina, Servicio de Hidrografia Naval, 1963  
[i.e., 1964]. xix, 107 p.
109. Dictionary of Botany Including Terms Used in Biochemistry, Soil Science and  
Statistics. George Usher. Princeton, Van Nostrand, 1966. 404 p.
110. Dictionary of economic plants. 2nd ed.  
J.C. Uphof. New York, S-H Service Agency, 1968.
111. Dictionary of the flowering plants & ferns.  
John C. Willis. Ed. by Shaw, H.K.A., 7th ed. New York, Cambridge Univ.  
Press, 1967.
112. Dictionnaire de botanique.  
H. Baillon. Paris Hachette, 1876-92. 4v. illus.
113. Glossary of Botanic Terms with Their Derivation and Accent. 4th rev. and enl.  
ed. Benjamin Dayden Jackson. New York, Hafner, 1960. (Pepr. of 1928 ed.).  
481 p.
114. Index to grass species.  
A. Chase and C.D. Niles, comps. Smithsonian Institution. Boston, Mass.,  
G.K. Hall, 1963. 3v. \$250.

BOTANY (Cont'd)

ENCYLOPAEDIAS

115. Encyclopedia of water plants.  
J. Stodola. Jersey City, N.J., T.F.H. Publications, Inc., 1967. 368 p.  
illus. (incl. col. pl.). \$9.95.
116. Grzimek's Encyclopedia of ethology.  
B. Grzimek, ed. English ed., edited by Klaus Immelmann. New York,  
London, etc., Van Nostrand Reinhold, 1977. xx, 705 p. illus. £32.
117. The Pocket encyclopedia of cacti and succulents in color.  
Edgar & Brian Lamb. New York, Macmillan, 1970, c1969.

HANDBOOKS

118. Beginner's guide to botany.  
C.L. Duddington. London, British Book Centre, 1971.
119. Collins' Guide to mushrooms and toadstools; with 96 colour plates from  
Flora agaricina danica, by J.E. Lange. M. Lange and E.B. Moba. London,  
Collins, 1963. 257 p. illus. £3.50.
120. General botany manual; exercises on the life histories, structures, physiology,  
and ecology of the plant kingdom. 3rd ed. Paul C. Lemon. St. Louis,  
Mosby, 1970.
121. Mycologists handbook.  
D.L. Hawksworth. Kew, Surrey, Commonwealth Mycological Institute, 1974.  
231 p. £5.50; £2.75.
122. Mycological Guidebook.  
Mycological Society of America. Mycological Guidebook Committee. Ed. by  
Russell B. Stevens. Seattle, University of Washington Press, 1974. 703 p.  
illus. bibliog. index.

## ENTOMOLOGY

### BOOKS

123. Butterflies of the World.  
H.L. Lewis. Chicago, Follett, 1973. 312 p. illus. (part col.). index.
124. Common names of insects and related organisms.  
Entomological Society of America. (1978 revision). D.W.S. Sutherland, Chairman, Committee on Common Names of Insects. College Park, Md., the Society, 1970. [11], 132 p. £3.25.
125. Destructive and useful insects; their habits and control.  
C.L. Metcalf and W.P. Flint. 4th ed. rev. by R.L. Metcalf. New York, London, etc., McGraw-Hill, 1962. xii, 1087 p. illus., tables.
126. Entomological nomenclature and literature.  
Willard Joseph Chamberlin. 3rd ed., rev. & enl. Westport, Conn., Greenwood Press, 1970, c1952.
127. Entomologisches Wörterbuch mit besonderer Berücksichtigung der morphologischen terminologie. S. von Keler. 3. durchgesehene und erw. Aufl. Berlin, Akademie-Verlag, 1963. xvi, 788 p. illus., pl., tables.
128. Imms' General textbook of entomology.  
A.D. Imms. 10th ed., by O.W. Richards and R.G. Davies. London, Chapman & Hall, 1977. 2v. (135 p.).
129. Insects and other arthropods of medical importance.  
K.G.V. Smith, ed. London, British Museum (Natural History), 1973. xiv, 561 p. illus. £15.
130. Insects of the World.  
Walter Linsenmaier. Tf. from the German by Leigh E. Chadwick. New York, McGraw-Hill, 1972. 392 p. illus. (col.). index.
131. The Oxford book of insects.  
Illustrations by Joyce Bee [and others]. Text by John Burton [with others]. London, Oxford Univ. Press, 1968. viii, 208 p. illus.

### DICTIONARY

132. A dictionary of entomology.  
A.W. Leftwich. London, Constable, 1976. [v], 306 p. £6.50.
133. A glossary of entomology: Smith's An explanation of terms used in entomology, completely revised and re-written. J.R. De La Torre-Bueno. Brooklyn Entomological Society, 1962. ix, 336, 36 p. illus. (pl.).

## ZOOLOGY

### ATLAS

134. Animal Atlas of the World.  
E.L. Jordan. Maplewood, N.J., Hammond, 1969. 224 p. index.
135. Atlas of Wildlife.  
Jacqueline Nayman. New York, John Day, 1972. 124 p. illus. (col.).  
index.
136. The Rand McNally Atlas of World Wildlife.  
Ed. by Martyn Bramwell. Chicago, Rand McNally, 1973. 208 p. illus.  
(col.). maps. bibliog. index.

### BOOKS

137. A Field Guide to the Larger Mammals of Africa.  
Jean Dorst. Boston, Houghton Mifflin, 1970. 287 p. illus. (part col.).  
maps. bibliog. index.
138. A New Dictionary of Birds.  
A.L. Thompson. London, Nelson, 1964. 928 p. illus. plates.
139. Birds of prey of the world.  
Mary L. Grossman & J. Hamlet. New York, Potter, 1970.
140. Butterflies of the world.  
H.L. Lewis. London, Harrap, 1973. xvi, 312 p. illus. (col.), maps. £10.
141. Check-List of Birds of the World.  
James Lee Peters. Cambridge, Mass., Harvard University Press, 1931-1968.  
15 v.
142. Eagles, hawks and falcons of the world.  
L. Brown and D. Amadon. London, Country Life Books, 1968. 2 v. illus.,  
tables.
143. Eagles of the World.  
Leslie Brown. New York, Universe Books, 1977. 224 p. 76-23481. 0-  
87663-278-9. \$12.50.
144. Field guide to the mammals. 2nd ed.  
William H. Burt and R.P. Grossenheider. Boston, Houghton-Mifflin, 1964.
145. Fishes of the world: an illustrated dictionary.  
A. Wheeler. American consultant editor, Thomas H. Fraser, New York,  
Macmillan Publishing Co., Inc., 1957. xiv, 366 p. illus. (incl. col. pl.).  
\$27.50.
146. Freshwater Fishes of the World.  
Gunther Sterba. Translated and rev. by Denys W. Tucker. London, Vista  
Books, 1962. 878 p. illus. plates. tables.

ZOOLOGY (Cont'd)

BOOKS (Cont'd)

147. Fundamentals of ornithology. 2nd ed.  
J. Van Tyne and A.J. Berger. Chichester, Wiley, 1976. vi, 624 p.  
illus.
148. Guide to identification of marine and estuarine invertebrates: Cape Hatteras to the Bay of Fundy. Kenneth L. Gosner. New York, Wiley (Interscience), 1971.
149. Guide to the Taxonomic Literature of Vertebrates.  
Richard E. Blackwelder. Ames, Iowa State University Press, 1972. 259 p.
150. Handbuch der Zoologie.  
Eine Naturgeschichte der Stamme des Tierreiches. Gegrundet von Willy Kükenthal. 2. Aufl. hrsg. von J.G. Helmcke [u.a.]. Berlin, de Gruyter, 1968-.
151. Herpetology.  
K.R. Porter. Philadelphia, London, etc., W.B. Saunders Co., 1972.  
[iv], 524 p. illus., diagrs., graphs, tables.
152. How to know the freshwater fishes. 2nd ed.  
Samuel Eddy. Dubuque, Iowa, Wm. C. Brown, 1970.
153. Hyman Series in Invertebrate Biology: Zoological Sciences.  
Libbie Henrietta Hyman. New York, McGraw-Hill, 1940-1967. 6v. illus.  
(McGraw-Hill Publications in the Zoological Sciences).
154. Invertebrate zoology.  
A. Kaestner. New York, London, Wiley: Interscience, 1967-. v.1-. illus.  
(v.3. 1970. \$32.50).
155. Key-Word-Index of Wildlife Research.  
Zurich, Swiss Wildlife Information Service, 1974. v.1- .
156. Living Amphibians of the World.  
Doris M. Cochran. Garden City, N.Y., Doubleday, 1961. 199 p. illus.
157. Living Fishes of the World.  
Earl Stannard Herald. Garden City, N.Y., Doubleday, 1961. 303 p. illus.
158. Mammals of the World. 3rd ed.  
Ernest Pillsbury Walker. (Vol. 3, published in 1968 by the same press, is still in 2nd ed.). Baltimore, Johns Hopkins Press, 1975. 3v. illus.
159. Poisonous and Venomous Marine Animals of the World.  
Bruce Halstead. Sections on chemistry by Donovan A. Courville. Washington, Government Printing Office, 1965-1970. 3 v. illus.
160. Poisonous snakes of the world: a manual for use by U.S. Amphibious Force.  
United States Department of the Navy. Office of the Chief of Naval Operations. Office of Navy Intelligence. Washington, U.S. Government Printing Office, 1962. [iii], 168 p. illus. (pl.). (1968 ed. viii, 212 p).

ZOOLOGY (Cont'd)

BOOKS (Cont'd)

161. Principles of animal physiology.  
J.A. Wilson. New York, Macmillan; London, Collier-Macmillan, 1972.  
xvi, 842 p. illus. £12.
162. Protozoology. 4th ed.  
R.R. Kudo. Springfield, Illinois, Thomas, 1954. xi, 966 p. illus.  
(5th ed. 1966, xiii, 1174 p.).
163. Reptiles of the world: the crocodiles, lizards, snakes, turtles and tortoises of the Eastern and Western hemisphere. R.L. Ditmars. London, Lane 1933.  
xx, 321 p. illus. (pl.). (Reprinted London, Collier-Macmillan, 1966).
164. Review of medical and veterinary mycology; compiled from world literature on mycoses of man and animals, in collaboration with the Bureau of Hygiene and Tropical Diseases and the Commonwealth Bureau of Animal Health. Surrey Kew. Commonwealth Mycological Institute, 1943-. v.1, no.1-. Quarterly.  
\$65 pa.
165. Snakes - a natural history. 2nd ed.  
H.W. Parker. rev. and enlarged, by A.G.C. Grandison. London, British Museum (Natural History), and Cambridge Univ. Press, 1977. 108 p. illus.  
(incl. col. pl.). £2.50.
166. Snakes of the world.  
Raymond L. Ditmars. New York, Macmillan, 1966.
167. Textbook of zoology. 7th ed.  
A.J. Marshall and others, eds. London, Macmillan Press, 1962-72. 2 v.  
(xix, 874 p.; xxii, 952 p.). illus.
168. The evolutionary ecology of animal migration.  
E.R. Baker. London, Hodder & Stoughton, 1978. 1012 p. illus., diags.,  
graphs, maps. £35.
169. The fresh & salt water fishes of the world.  
E. Migdalski and G.S. Fichter. London, Octopus Books, 1977. 316 p.  
illus., tables. £7.95.
170. The insects: structure and function.  
R.F. Chapman. London, English Universities Press, 1969. xii, 819 p.  
illus. (3rd ed. London, Hodder, 1975. 832 p. £5.95).
171. The invertebrates.  
L.H. Hyman. New York, London, etc., McGraw-Hill, 1940-. v.1-. illus.  
ea. £26.25.
172. The life of vertebrates. 2nd ed.  
J.Z. Young. Oxford, Clarendon Press, 1962. xvi, 820 p. illus., diags.,  
maps.

ZOOLOGY (Cont'd)

BOOKS (Cont'd)

173. The mammals: a guide to the living species.  
D. Morris. London, Hodder & Stoughton, in association.
174. The new field book of reptiles and amphibians.  
Doris Mabel Cochran. New York, Putnam, 1970.
175. The Oxford book of invertebrates: protozoa, sponges, coelenterates, worms, molluscs, echinoderms and arthropods (other than insects). Text by David Nichols, and John A.L. Cooke (Arthropods). London, Oxford Univ. Press, 1971. vii, 218 p. illus.
176. The Oxford book of vertebrates.  
by Marion Nixon and Derek Whiteley. London, Oxford Univ. Press, 1972. 224 p. illus., maps. £3.50.
177. The Shell Book.  
Julia Ellen Rogers. Rev. ed. Boston, Branford, 1951. 503 p. illus. index.
178. Wildlife in Danger.  
James Fisher, Nowl Simon and Jack Vincent. New York, Viking, 1969. 368 p.

DICTIONARIES

179. A dictionary of zoology. 3rd ed.  
A.W. Leftwich. London, Constable; New York [etc.], Van Nostrand. 1973. ix, 478 p.
180. A Science Dictionary of the Animal World.  
Michael Chinery. New York, Watts, 1969. 288 p. illus. (part col.).
181. College dictionary of zoology.  
Robert Wilson Pennak. New York, Ronald Press, 1964.
182. Dictionary of herpetology: a brief and meaningful definition of words and terms used in herpetology. J.A. Peters. New York & London, Hafner, 1964. 392 p. illus. (pl.).
183. Dictionary of Zoology. 2nd ed.  
A.W. Leftwich. London, Constable and Co., Ltd.; distr. New York, Crane, Russak, 1973. 478 p.

## ZOOLOGY (Cont'd)

### DICTIONARIES

184. New dictionary of birds.  
Arthur Landsborough Thomson, ed. New York, McGraw-Hill, 1964.
185. Systematic Dictionary of Mammals of the World. 2nd ed.  
Maurice Burton. London, Museum Press, 1965; New York, Apollo Editions, 1968. 307 p. illus.

### ENCYLOPAEDIAS

186. Encyclopaedia of aviculture.  
A. Rutgers and K.A. Norris, eds. London, Blandford Press, 1970-77. 3v. illus. (incl. pl.). maps. £35.00, the set.
187. Encyclopedia of reptiles & amphibians.  
J.F. Breen. Hong Kong, T.F.H. Publications, 1974. 576 p. illus.
188. Grzimek's Animal life encyclopedia.  
B. Grzimek, ed. New York, London, etc., Van Nostrand Reinhold, 1972-74. 13 v. illus., maps, ea. £20.
189. Larousse Encyclopedia of animal life.  
Based on *La vie des animaux* by Leon Betin, with contributions by Maurice Burton. London, Hamlyn, 1967. 640 p. illus. (incl. pl.). £4.95.
190. The International Wildlife Encyclopedia.  
Maurice Burton and Robert Burton, eds. New York, Marshall Cavendish Corp.; distr. New York, Purnell Library Service, 1969-1970. 20 v. illus. index.

### HANDBOOKS

191. A handbook of living primates.  
J.R. Napier and P.H. Napier. London & New York, Academic Press, 1967. xiv, 456 p. illus. (pl.). tables. £16.50.
192. A Manual of practical vertebrate morphology. 4th ed rev.  
John Tennent Saunders. Oxford, Clarendon Press, 1969.
193. African handbook of birds. 3 series.  
C.W. Mackworth-Praed and C.H.B. Grant. London, Longmans, 1952-. illus. (incl. pl.).
194. Drug Dosage in Laboratory Animals: A Handbook.  
Charles Dee Barnes and L.G. Eltherington. Berkeley, University of California Press, 1965. 302 p.

ZOOLOGY (Cont'd)

HANDBOOKS (Cont'd)

195. Handbook of the birds of Europe, the Middle East and North Africa: the birds of the Western Palearctic. S. Cramp, ed. Oxford, Univ. Press, 1977-. illus. diags., tables, maps.
196. Manual of Neotropical Birds, Volume 1. Spheniscidae (Penguins) to Laridae (Gulls and Allies). Emmet R. Blake. Chicago, University of Chicago Press, 1977. 674 p. 75-43229. 0-2226-05641-4. \$50.00.

**BIOLOGICAL  
ABSTRACTS & INDEXES**

ABSTRACTS AND INDEXES

197. Abstracts of entomology.  
Philadelphia, Pa., BioScience Information Service, 1970-. v.1, no.1-.  
Monthly. \$95 pa. Cumulative index. \$35.
- About 1,000 indicative and informative abstracts per issue.
- Coverage: pure and applied studies of insects and arachnida, including chemical, physical, biological control, economic entomology, physiology, pathology, morphology, systematics, medical entomology, ecology. Computer-compiled author index; biosystematic, generic, concept and subject indexes; (each with instructions for use), per issue. Includes all abstracts and references covering pure and applied studies involving insects and arachnids from Biological Abstracts and BioResearch index (qqv).<sup>5</sup>
198. Abstracts of Mycology. v. 1-.  
Philadelphia, Biosciences Information Service, 1967-. Monthly.
- A compilation of all the abstracts and references pertaining to fungi and lichens which are reported in Biological Abstracts (9-4) and BioResearch Index (9-4n). Each issue includes author, biosystematic, CROSS, and subject indexes to more than 10,000 abstracts and references annually from about 1,200 primary literature sources.<sup>3</sup>
199. Algae Abstracts: A Guide to the Literature. 2 vols.  
Prepared from material supplied by Water Resources Scientific Information Center. New York:IFI/Plenum, 1973.
- All sources from the Water Resources Scientific Information Center's data base with the word "alga" in the citation are included through 1972. Approximately 1,300 rather lengthy abstracts in all.<sup>4</sup>
200. Amino Acid Peptide and Protein Abstracts.  
London: Information Retrieval, 1972-. Monthly.
- Surveys literature covering the major aspects of the subject. Arranged under broad subject areas. Includes author, peptide, and protein indexes and an annual subject index.<sup>4</sup>
201. Aquatic Sciences and Fisheries Abstracts. Vols. 1-.  
London: Information Retrieval, 1971-. Monthly.
- Originally titled Aquatic Biology Abstracts, 1969-1971. Some 3,000 journals are culled resulting in some 15,000 abstracts annually. Emphasis on books and articles in physical and chemical oceanography, limnology, and pollution and its effects on fishes. Monthly and annual cumulative author, taxonomic, geographic and subject indexes.
- Scope: International.<sup>4,1</sup>

## ABSTRACTS AND INDEXES

(Continued)

202. Behavioral Biology Abstracts.  
London: Information Retrieval, 1973-. Quarterly.
- References and abstracts arranged under subject categories and subdivision by taxonomic groups. All abstracts in English, though foreign titles are included. International in scope.<sup>1,4</sup>
203. Biological Abstracts. Vols. 1-.  
Philadelphia: Biosciences Information, 1926-. Semimonthly.
- The major abstracting service available on the biological sciences. Approximately 140,000 abstracts of articles from some 8,000 serials as well as books, reports, etc., are listed annually under 85 subject categories. Arranged under 81 subjects. Aerospace and Underwater biological effects, agronomy, allergy, enzymes, horticulture, laboratory animals, metabolism, palaeo botany, pediatrics, pharmacology, phytopathology, soil science, etc. Various indexes on colored paper: author; biosystemic or taxonomic; CROSS-referring abstracts numbers to major categories and sub-headings; and BASIC, or subjects in context based on titles. The computerized base is BA PREVIEW. From the BIOSIS data base several smaller abstracts such as Abstracts of Entomology, Abstracts of Mycology, etc. are generated. BA is supplemented by Bioresearch Index.<sup>1,5</sup>
204. Biological Membrane Abstracts, 1973-  
Information Retrieval, Ltd. Monthly.
- Coverage: Among the broad areas are chemical components, physical properties, model systems and theoretical aspects of membrane functions, isolation techniques, morphology, transport and related phenomena, etc. Proceedings included if papers printed in full; otherwise only listed in Notification of Proceedings. Author index, cumulated annually.
- Scope: International.<sup>1</sup>
205. Bioresearch Index.  
Philadelphia: Bioscience Information, 1967-. Monthly.
- Original title: Bioresearch Title, 1965-1967.  
Supplements Biological Abstracts by indexing life sciences research literature not included in Biological Abstracts such as theses, symposia, meetings, etc. Includes author and permuted-title indexes.<sup>4</sup>
206. Carbohydrate Metabolism Abstracts, 1973-  
Information Retrieval, Ltd. Monthly.
- Arrangements: By subject. Broad areas subdivided into more narrow topics.
- Coverage: Broad subject areas are: structural and functional aspects, metabolic pathways and regulation, transport, enzymes and their regulations, studies on organisms, diseases and metabolic defects. Author and subject indexes.
- Scope: International.<sup>1</sup>

## ABSTRACTS AND INDEXES

(Continued)

207. Entomology abstracts.

London, Information Retrieval, Ltd., 1969-. v.1, no. 1-. Monthly.  
£80 pa (UK & India); £85 (elsewhere).

V.8, 1977: 9,296 indicative and informative abstracts. Sections: General, Bibliography - Systematics - Technique - Morphology - Physiology, anatomy & histology - Reproduction and development - Biology & ecology - Generics & evolution - Geography and present day faunas - Fossils forms & faunas. Notification of proceedings. Book notices. Author and subject indexes per issue. Annual subject, author and taxonomic indexes.

Scope: International.<sup>5</sup>

208. Excerpta Botanica.

Stuttgart, Fischer, 1959-. Section A, 10 issues a year; Section B, quarterly.

Section A, "Taxonomica et Chorologica," consists of abstracts of articles on systematic botany (i.e., studies concerning specific plants or plant groups); annotations are in English, German, or French. The last part of this section abstracts periodical literature of herbaria, gardens, museums, congresses, biographies, and bibliographies. Author and subject indexes.

Section B, "Sociologica," is a topical bibliographic listing (without annotations) of monographic world literature on plant geography and ecology; each issue deals with selected countries, sub-classified by several categories of botanical interest. Author index.<sup>3</sup>

209. Genetics Abstracts, 1968-

Information Retrieval, Ltd. Monthly.

Coverage: Preface states: "All aspects of molecular, viral, bacterial, fungal, algal, plant, animal and human genetics... Molecular genetics includes papers on DNA and RNA (structure, physico-synthesis; i.e. Aminoacylation of RNA, ribosome attachment, etc.), ribosomes, histones, nucleoproteins and enzyme induction and repression. Immunology papers on such topics as isoantigen structure are included as well as obvious ones on, e.g., histo-compatibility loci." Author & subject indexes.

Scope: International.<sup>1</sup>

210. International Abstracts of Biological Sciences. v.1-

Oxford, Pergamon, 1954-. Monthly.

From 1954 to 1956 this service was called British Abstracts of Medical Sciences. It is arranged by broad subject categories, and entries are numbered consecutively. Titles of articles are translated into English; translations from Referativnyi Zhurnal's biology section are included. The strong areas are the physiological and biochemical aspects of anatomy, animal behavior, biochemistry, endocrinology, experimental (and not clinical) medicine, microbiology, pathology, and pharmacology. Quarterly author and subject indexes. Oral biology, immunology, cytology, and genetics.<sup>3,1</sup>

ABSTRACTS AND INDEXES

(Continued)

211. Laboratory Animal Science: A Review of the Literature.  
Argonne, IL: Argonne National Laboratory, Biological and Medical Research Division, 1966-. Quarterly.
- Approximately 155 international journals are culled for brief abstracts on laboratory-animal technology and medicine. Species index.<sup>4</sup>
212. Marine Fisheries Abstracts, 1948-  
U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (Government Printing Office). Monthly.
- Coverage: Biological aspects of fishery science and technological studies dealing with aquatic resource supply, harvesting, processing, utilization and distribution. Annual reports, patents and proceedings included. Subject and author indexes.
- Scope: International. Includes trade, engineering and scientific journals.<sup>1</sup>
213. Microbiology Abstracts, 1966-  
Information Retrieval, Ltd. Monthly. Published in three sections: A, Industrial and Applied Microbiology (Title of section varies: Industrial Microbiology); B, Bacteriology (Title of section varies: General Microbiology and Bacteriology); (both sections supersede and continue the volume numbering of Industrial Microbiology Abstracts); C, Algology, Mycology and Protozoology (published from 1972).
- Arrangement: By broad subjects which are further subdivided into narrower topics. A full explanation of the arrangement of all the sections found in the Preface to each issue.
- Coverage: Section A covers broadly applied aspects of bacteriology, mycology, and virology. Excludes the following papers on antibiotics: those in which the antibiotic is used mainly as a tool; those in which it is used as a mutagen in organisms other than microorganisms; those concerning cancer chemotherapy, those concerning protein and nucleic acid metabolism in organisms other than microorganisms. Section B covers every aspect of pure bacteriology. Separate sections are provided for papers on Mycoplasmatales and Rickettsiales. Section C includes abstracts on non-industrial aspects of the Algae, Fungi and Protozoa, including micro and microscopic species.
- Scope: International.<sup>1</sup>
214. Oceanic Abstracts, 1964/66-  
Pollution Abstracts, Inc. Bi-monthly. Formerly: Oceanic Index, Oceanic Index Citation Journal with Abstracts. The format has varied somewhat since publication began.
- Coverage: Biology, fisheries, geology, meteorology, oceanography, remote sensing, desalination, pollution, engineering, diving, deep sea, buoys, etc.
- Scope: International.<sup>1</sup>

## ABSTRACTS AND INDEXES

(Continued)

215. Oceanographic abstracts and bibliography. Deep sea research. Oxford, etc., Pergamon Press, 1953-. v. 1-, no. 1-. Monthly. \$159.50 pa.

About 700 references per issue. "Oceanographic bibliography" - in subject groups (A. Physical oceanography - B. Chemical oceanography - C. Submarine geology and geophysics - D. Marine meteorology - E. Biological oceanography - F. General. "Oceanographic abstracts" - c. 250 abstracts per issue under authors A-Z. References are asterisked if abstracted in the same issue. No issue indexes. Annual author and serial index.

Ocean abstracts, with indexes (La Jolla, Calif., Pollution Abstracts, Inc., 1972-. 6 pa. \$345 pa.) has c. 6,000 indicative abstracts pa. Classified arrangement (biology/fisheries; geology/oceanography/ - meteorology; acoustics/optics/positioning/remote sensing; desalination/pollution/coastal resources; engineering/materials; diving/offshore/deep sea; ships/submersibles/buoys; government/legal). Keyword and author indexes per issue, cumulated annually.<sup>5</sup>

216. Review of applied entomology. London, Institute of Entomology, 1913-. Series A & B, ea. monthly.

series A: Agricultural, \$70 pa.  
B: Medical and veterinary. £40 pa.

Series A (1978: 6,361 abstracts and references) has such sections as Taxonomy, faunas... Arthropoda of agricultural importance - Economically significant plants associated with arthropods... Protection against arthropods and use of arthropods for biological control - Chemicals - Organisations and communication. Author and subject indexes per issue and annually.

Series B (1978: 3,053 abstracts and references) has 12 sections, eg, Taxonomy, faunas... Ecology and behavior - Arthropoda of medical and veterinary importance... Diseases and disorders... Organisations and communications. Author and subject indexes per issue and annually.<sup>5</sup>

217. Review of Plant Pathology, 1922- Commonwealth Agricultural Bureau, prepared by Commonwealth Mycological Institute. Monthly. Formerly: Review of Applied Mycology, 1922-1969.

The "Readers' Guide" states that "The abstracts are arranged in an ever-repeating series (indicated by page and section headings) composed of two main parts--one general, the other of diseases arranged under the host. However a paper on tobacco mosaic virus not referring to a specific host, would come under viruses rather than tobacco.

Coverage: Covers more important literature on "diseases of plants caused by fungi, bacteria, viruses, mycoplasmas and nonpathogenic factors." Includes books and other reports on conferences, symposia, etc. Taxonomic papers are listed in the Institutes half-yearly Bibliography of Systematic Mycology, and new generic and specific names of fungi are compiled in Index of Fungi.

Scope: International.<sup>1</sup>

## ABSTRACTS AND INDEXES

(Continued)

218. Small Abstracts Abstracts, v. 3, 1977-date.  
(Commonwealth Agricultural Bureaux)

Topically arranged: covers subjects of general veterinary medicine, diseases caused by bacteria, virus, mycoses, parasitic, and organic causes, neoplasms, toxicology, immunology, pharmacology, anesthesia, physiology, reproductive physiology, breeding and husbandry, genetics, nutrition, haematology, biochemistry, anatomy, welfare, radiography and surgery. Annual author and subject indexes.<sup>2</sup>

219. Sport Fishery Abstracts, v.1, 1955-date.  
(U.S. Fish and Wildlife Service)

Covers all subjects which have an application to the conservation and management of sport fishery resources. Quarterly with annual author and subject indexes. Combined indexes: v.1-5, v.6-10, v.11-15.

Scope: International.<sup>2</sup>

220. The Zoological record, being the record of zoological literature relating to the year....  
London, Zoological Society of London, 1865-. v.1 (covering 1864)-. Annual. £125 pa. The 20 annual parts are available separately. Microfilm ed. available (v.1-92: Johnson Reprint Corp.; v.93-: University Microfilms).

V.1-6 as Record of zoological literature; v. 43-52, 1906-15, form Section N of the International catalogue of scientific literature: the one section of the International Catalogue that has had a continued existence to date. The most important source for retrospective searching in systematic zoology, including palaeontology. 20 parts:

1. Comprehensive zoology
2. Protozoa (1. Recent; 2. Fossil)
3. Porifera
4. Coelenterata
5. Echinodermata
6. Vermes (A, B, C)
7. Brachiopoda
8. Bryozoa (Polyzoa)
9. Mollusca
10. Crustacea (1. Recent; 2. Fossil)
11. Trilobita
12. Arachnida
13. Insecta (A,B,C,D,E,F)
14. Protochordata
15. Pisces (1. Recent; 2. Fossil)
16. Amphibia
17. Reptilia
18. Aves
19. Mammalia
20. List of new genera and subgenera.

## ABSTRACTS AND INDEXES

(Continued)

Each section consists of three parts: a list of papers and books, arranged by authors, A-Z; a subject index; a systematic index (part of which is a classified index of new genera and species). About 50,000 references per year from world literature. Time lag: 4 years. "Its chief fault is the lack of a general index to the entire volume". (Library trends, v.15, no. 4, April 1967, p 831).<sup>5</sup>

221. World Fisheries Abstracts, 1948-1973.  
Food and Agricultural Organization of the United Nations. Ceased. Published in English, French and Spanish.

Arrangement: By a code for abstract numbers (see below) which forms a loose informal subject arrangement. The abstracts are printed on international size (127 x 76 mm) cards and appear in the abstracts uncut. To use in the uncut form, indexes provided in each issue are necessary. The cards may be cut and filed by any of five possible methods described.

Coverage: All aspects of technical literature on fisheries and related industries including canning and freezing methods, fishing boats, and equipment, fishing methods, water purification, kinds of fish, etc.

Scope: International.<sup>1</sup>

## REFERENCES

1. Abstracts and Indexes in Science and Technology: A Descriptive Guide.  
Dolores B. Owen and Marguerite M. Hanchey. Metuchen, New Jersey: The Scarecrow, 1974.
2. Life Sciences and Allied Fields: Indexes and Abstracts, Book Review Indexes, Serials Bibliographies, Translations. D. Corinne Colpitts. Fayetteville, Arkansas: Arkansas University, Mullens Library, 1978.
3. Science and Engineering Literature.  
H. Robert Malinowsky, et al. Littleton, Colorado: Libraries Unlimited, 1976.
4. Scientific and Technical Information Sources.  
Ching-Chih Chen. Cambridge, Massachusetts: MIT Press, 1977.
5. Walford's Guide to Reference Material. Volume I: Science and Technology.  
Fourth edition. Edited by A.J. Walford. London: The Library Association, 1980.

**PHYSICAL SCIENCES  
REFERENCE BOOKS**

## ASTRONOMY

### ATLAS

222. A Star Atlas and Reference Book (Epoch 1950) for Students and Amateurs...; The Reference Handbook. A.P. Norton. By J. Gall Inglis and A.P. Norton; edited by R.M.G. Inglis. 15th ed. Edinburgh and London, Gall and Inglis, 1964. 57 p. with 18 maps. illus. diagrs. tables.
223. Norton's Star atlas and reference handbook. A.P. Norton. (epoch 1950.0). 17th ed. edited by Gilbert E. Satterthwaite, in consultation with others. Edinburgh, Gall & Inglis, 1976. viii, 116, [37] p. maps. £5.75
224. Palomar Observatory Sky Atlas, July 16, 1954. National Geographic Society, Washington, D.C. Pasadena, Calif., printed by the Graphic Arts Facilities of the California Institute of Technology, 1954-1958. 10 p. and atlas of 1,618 plates in 9 v. and Supplement (Southern Extension).
225. Patrick Moore's Color Star Atlas. Patrick Moore. New York, Crown, 1973. 112 p. index.
226. Photographic lunar atlas, based on photographs taken at the Mount Wilson, Lick, Pic du Midi, McDonald and Yerles observatories. G.P. Kuiper and others, ed. Chicago, Univ. of Chicago Press; London, Pergamon Press, 1960. 23 p.; atlas of 230 sheets. Supplement no. 1-4. 1960-67.
227. Star Atlas of Reference Stars and Nonstellar Objects. Smithsonian Institution. Astrophysical Laboratory. Cambridge, Mass., M.I.T. Press, 1969. 13 p. illus. 152 charts in box.
228. The Atlas of the Universe. Patrick Moore, ed. Foreword by Sir Bernard Lovell. Chicago, Rand McNally, 1970. 272 p. illus. mainly color. index
229. The Mitchell Beazley new concise atlas of the universe. P. Moore. London, Mitchell Beazley, 1978. 190 p. illus., maps. £12.95.
230. The Times Atlas of the Moon. H.A.G. Lewis, ed. London, Times Newspapers Ltd.; New York Times, 1969. 110 p. maps. illus. (part col.). index.

### BOOKS

231. Astronomy: A to Z. Lloyd Motz. New York, Grosset & Dunlap, 1964.
232. Astrophysical Observatory. Smithsonian Institution. Star catalog. Washington, D.C., U.S.G.P.O., 1966. 4 v.
233. Brown's Nautical almanac: daily tide tables. Glasgow, Brown, Son & Ferguson. diagrs., tables. Annual. (101st year. 1978. 959 p.).

ASTRONOMY (Cont'd)

BOOKS (Cont'd)

234. Geodesy. 3rd ed.  
G. Bomford. Oxford, Clarendon Press, 1971. [x], 731 p. illus., diagrs., tables. £15.
235. Pictorial Guide to the Planets. 2nd ed.  
Joseph H. Jackson. New York, Crowell, 1973. 248 p. illus. index.
236. Reference catalog of bright galaxies.  
Gerard H. DeVancouleurs. Austin, Texas, Univ. of Texas Pr., 1964.
237. Second reference catalogue of galaxies; containing information on 4364 galaxies, with reference to papers published between 1964 and 1975.  
G. DeVancouleurs and others. Austin, Univ. of Texas Press, 1976. 396 p. illus. \$5.
238. Sourcebook on the Space Sciences.  
Samuel Glasstone. Princeton, Van Nostrand, 1965. 937 p. illus.
239. Smithsonian Astrophysical Observatory star catalogue.  
Smithsonian Astrophysical Observatory. Washington, U.S. Government Printing Office, 1966. 4 v., magnetic tape (2 reels) compatible with IBM 729 units.
240. Telescopes; how to make them and use them.  
T. & L. Page. New York, Macmillan, 1966.
241. The Air almanac.  
London, H.M. Stationery Office. 2 p. tables. ea. £6.
242. The Complete Nautical Astronomer.  
Charles H. Cotter. New York, American Elsevier, 1969. 336 p. index.
243. The Flammarion Book of Astronomy.  
Trans. from French by Annabel and Bernard Pagel. London, Allen and Unwin; New York, Simon and Schuster, 1964. 670 p. illus. pl. diagrs. tables. planispheres.
244. Yearbook of Astronomy.  
Ed. by Patrick Moore. 1978. N.Y., Norton, 1978. 223 p. \$8.66. ISBN 0-393-06430-1. LC 77-82011.

DICTIONARIES

245. Amateur Astronomer's Glossary.  
Patrick Moore. New York, Norton, 1967. 162 p. illus. (The Amateur Astronomer's Library).
246. Astronomical Dictionary.  
Josip Kleczek. New York, Academic, 1961. 972 p.

ASTRONOMY (Cont'd)

DICTIONAIRES (Cont'd)

247. Definitions of terms used in geodetic and other surveys.  
H.C. Mitchell. Washington, U.S. Coast and Geodetic Survey, 1945. 121 p.  
(Reprinted 1969).
248. Dictionary of astronomy.  
E. Gros & L. Singer. (Chinese-English-Russian.). New York, Transatlantic,  
1969.
249. Dictionary of astronomy.  
Terry Maloney. New York, Fernhill, 1964.
250. Dictionary of visual science. A modern comprehensive dictionary covering  
the terminology of the visual sciences, including the fields of ocular  
anatomy, ocular physiology, ocular pathology, ocular embryology, neuro-  
ophthalmology, ocular histology, ocular genetics, comparative anatomy of  
the eye, ocular prosthetics. M. Schapero and others, eds.
251. Glossary of aeronautical and astronautical terms. 6th ed.  
British Standards Institution. London, the Institution, 1964-70. 18 pts.  
and index. (B.S. 185: 1964-70).
252. Glossary of navigation: a vade mecum for practical navigators.  
J.B. Harbord. 4th ed., rev. and enl. by C.W.T. Layton. Glasgow, Brown  
& Ferguson, 1938. x, [1], 451 p. diags. £1.05.
253. Glossary of terms frequently used concerning quasi-stellar radio sources  
(quasars). Compiled by A.G.W. Cameron, New York, the Institute, 1965.  
v. 17, [2] p. American Institute of Physics.
254. Glossary of astronomy and astrophysics.  
J. Hopkins. Chicago, Ill., & London, Univ. of Chicago Press, 1976.  
vii, 169 p. £7.50.
255. Illustrated Glossary for Solar and Solar-terrestrial Physics.  
Ed. by A. Bruzek and C.J. Durrant. Dordrecht, Reidel, 1977. 204 p.  
\$26.00. ISBN 90-277-0825-8. LC 77-11087.
256. Navigation dictionary. 2nd ed.  
United States. Naval Oceanographic Office. Washington, U.S. Government  
Printing Office, 1969, iv, 292 p. (H.O. 220).

ENCYCLOPAEDIAS

257. Cambridge Encyclopedia of Astronomy.  
Ed. by Simon Mitton. N.Y., Crown, 1977. 481 p. \$35.00. ISBN 0-  
517-52806-1. LC 77-2766.

ASTRONOMY (Cont'd)

ENCYLOPAEDIAS (Cont'd)

258. Concise encyclopedia of astronomy.  
Paul Muller. Chicago, Follett, 1968.
259. Concise encyclopedia of astronomy.  
A. Weigert and H. Zimmerman. Translated by J.H. Dickson. 2nd English ed., revised by H. Zimmerman. Bristol, Hilger, 1975. 532 p. illus., diags., tables. £9.
260. Encyclopedia of Astronomy.  
Gilbert E. Satterthwaite. New York, St. Martin's, 1971. 537 p.
261. Illustrated Encyclopedia of Astronomy and Space.  
Ian Ridpath, ed. N.Y., Crowell, 1976. 240 p. \$16.95. ISBN 0-690-01132-6.
262. Larousse Encyclopedia of Astronomy.  
By Lucien Rudaux and G. de Vaucouleurs; trans. by Michael Guest and John P. Sidgwick. Rev. ed. London, Hamlyn, 1966. 506 p. illus. maps. tables. diags.
263. The Cambridge encyclopedia of astronomy.  
Editor-in-chief, Simon Milton. London, Cape, 1977. 481 [114] p. illus. £15.

HANDBOOKS

264. Admiralty manual of hydrographic surveying.  
Great Britain. Navy Department. Hydrographer. [New ed.], London, Hydrographer of the Navy, 1965. 2v. diags., tables, graphs.
265. Admiralty manual of navigation.  
Great Britain. Navy Department. Rev. ed. London, H.M. Stationary Office, 1970-. 3v. illus. (B.R.45).
266. Amateur Astronomer's handbook.  
John Benson Sidgwick. 3rd ed., prepared by R.O. Gamble. London, Faber and Faber, 1971. 577 p. illus.
267. Burnham's Celestial Handbook; An Observer's Guide to the Universe beyond the Solar System. Robert Burnham, Jr. Revised and enlarged edition. New York, Dover, 1978. 3 v. Vol. 1 - \$8.50. ISBN 0-486-23567-X. LC 77-082888.
268. Celestial handbook.  
Washington, D.C., Celestial Press, 1966--

ASTRONOMY (Cont'd)

HANDBOOKS (Cont'd)

269. Handbook for planet observers.  
Gunter Dietmar Roth. New York, Van Nostrand-Reinhold, 1970.
270. Manual of astronomy. 5th ed.  
R. William Shaw and Samuel L. Boothroyd. Dubuque, Iowa, Wm. C. Brown, 1967.
271. Manual of map reading.  
Great Britain. Ministry of Defence. Prepared under the direction of the Chief of the General Staff. London, H.M. Stationery Office, 1973. 141 p. illus., diags., maps. (Army code no. 70947). £2.50.
272. The New Guide to the Planets.  
Patrick Moore. New York, Norton, 1971. 224 p. illus. index.
273. The New Space Encyclopaedia: A Guide to Astronomy and Space Exploration.  
New, rev. ed. New York, Dutton, 1974. 326 p. illus.
274. The Telescope handbook and star atlas.  
Neale E. Howard. New York, T.Y. Crowell, 1967.

## CHEMISTRY

### ATLAS

275. Atlas of Metal-Ligand Equilibria in Aqueous Solution.  
J. Kragten. Chichester, Ellis Horwood, 1978. L35.00. 781 p. LC 77-12168. ISBN 0-85312-084-6.

### BOOKS

276. Advances in analytical chemistry.  
New York & London, Interscience: Wiley, 1960-. v.1-. Annual..
277. Advances in chromatography.  
New York, Dekker; London, E. Arnold, 1966-. v.1-.
278. Advances in heterocyclic chemistry.  
New York, London, etc., Academic Press, 1963-. v.1-. (v.21. 1977. £34.80).
279. Advances in high temperature chemistry.  
New York & London, Academic Press, 1967 -. v.1-. (v.4. 1972. £23.45).
280. Advances in inorganic chemistry and radiochemistry.  
New York, London, etc., Academic Press, 1959-. v.1-. Annual (v.20. £27).
281. Advances in organic chemistry: methods and results.  
New York & London. Interscience: Wiley, 1960-. v.1-.
282. Advances in organometallic chemistry.  
New York, London, etc., Academic Press, 1964-. v.1.- (v.16. 1977. £25.55).
283. Advances in photochemistry.  
New York & London, Interscience: Wiley, 1963-. v.1-. Annual (irregular).
284. Advances in protein chemistry.  
New York, London, etc., Academic Press, 1944-. v.1.-. Annual. (v.30, 1976. £25.75).
285. Advances in Quantum Chemistry.  
New York, London, etc., Academic Press, 1964-. v.1-. (v.9. 1975. £30).
286. Advances in radiation chemistry.  
New York, London, etc., Interscience: Wiley, 1969-. v.1-.
287. Basic tables in chemistry.  
Roy A. Keller. New York, McGraw-Hill, 1967.
288. Chemical Equilibria in Carbon-Hydrogen-Oxygen Systems.  
Robert E. Baron James H. Porter, and Ogden H. Hammond. Cambridge, Mass. MIT Press, 1976. 110 p. ISBN 0-262-02121-8. \$9.95.
289. Chemical formulas and names.  
Virginia Powell. New York, Prentice-Hall, 1964.

CHEMISTRY (Cont'd)

BOOKS (Cont'd)

290. Chemical Principles. 4th ed.  
William L. Masterton. W.B. Saunders & Co., Philadelphia, 1977. \$21.00.
291. Chemical Principles.  
Robert S. Boikess. Harper & Row. New York, 1978. \$18.95.
292. Chemical tables.  
B.A. Nemeth. Translated from the Hungarian by I. Finaly. Bristol, Hilger, 1975. 477 p. tables.
293. Chemical Technology.  
Barnes and Noble, 1968-75.
294. Chemistry: A Modern Introduction. 2nd ed.  
Frank Brescia. W.B. Saunders, Co. Philadelphia, 1978. \$18.95.
295. Chemistry of carbon compounds.  
E.H. Rodd, ed. 2nd ed., edited by S. Coffey. Amsterdam, London, etc., Elsevier, 1964-. v.1-. illus, tables. Supplements, 1973-.
296. Chemistry of Pesticides.  
N.N. Melnikov. Ed by Frances A. Gunther and Jane Davis Gunther. Trans. by Ruth L. Busby, New York, Springer-Verlag, 1971. 480 p. illus. index. (Also published as Residue Reviews, Vol.-36).
297. Collins' National decimal reckoner.  
London, Collins, 1970. 832 p.
298. Comprehensive biochemistry.  
M. Florkin and E.H. Stotz, eds. Amsterdam, London, New York, Elsevier, 1962-. v.1- diagrs. ea. £7.16- £23.01.
299. Crystal Structures. 2nd ed.  
Ralph W.G. Wyckoff. New York, Wiley-Interscience, 1963-71. 6 v.
300. Dangerous properties of industrial materials. 3rd ed.  
N.I. Say, ed. New York, Van Nostrand-Reinhold, 1968.
301. General Chemistry.  
Jerry March. Macmillan Publishing, Co., New York, 1979. \$18.95.
302. Glossary of Chemical Terms.  
Clifford A. Hampel and G. Hawley Gessner. New York, Van Nostrand Reinhold, 1976. 281 p. ISBN 0-442-23238-1. \$14.95.
303. Hazards in the Chemical Laboratory. 2nd ed.  
Edited by G.D. Muir. London, The Chemical Society, 1977. \$14.00. 473 p. LC 77-364884. ISBN 0-85186-699-9.

CHEMISTRY (Cont'd)

BOOKS (Cont'd)

304. How to Name an Inorganic Substance.  
International Union Of Pure and Applied Chemistry. Commission on Nomenclature of Inorganic Chemistry. Oxford, Pergamon Press, 1977. L2.80. 36 p. ISBN 0-08-021982-9.
305. Ion Exchange Equilibrium Constants.  
Y. Marcus and D.G. Howery. London, Butterworths, 1975. 41 p. ISBN 0-408-70710-0. \$2.40.
306. Industrial Solvents Handbook. 2nd ed.  
Ibert Mellan. Park Ridge, NJ, Noyes, 1977. \$41.00. 567 p. LC 77-15067. ISBN 0-8155-0651-1.
307. Inorganic Chemistry.  
R.B. Heslop and K. Jones. Elsevier, 1976.
308. Introduction to chemical nomenclature. 3rd ed.  
Robert S. Cahn. New York, Plenum, 1968.
309. Introduction to nuclear chemistry.  
D.J. Carswell. New York, American Elsevier, 1967.
310. Lexicon of chemistry/Lexique de chimie.  
League of Arab States.. Education, Culture and Sciences Organisation. Permanent Bureau of Arabisation. Rabat, Bureau Permanent de Coordination de l'Arabisation, 1971. [1], xv, 141 p.
311. Mathematics for chemists.  
Charles. L. Perrin. New York, Wiley (Interscience), 1970.
312. Noble Gas Compounds: A Bibliography.  
Donald T. Hawkins, Warren E. Falconer and Neil Bartlett, comps. New York,IFI/Plenum, 1978. \$45.00. 179 p. LC 77-26721. ISBN 0-306-65171-8.
313. Nomenclature of Organic Chemistry. 2nd ed.  
International Union of Pure and Applied Chemistry. (Section C); 3rd ed. (Sections A and B). New York, Plenum, 1971. 337 p.
314. Nomenclature of petrology. 2nd ed.  
A. Holmes. London, Murby, 1928. 284 p. (Reprinted New York, Hafner, 1972.)
315. Organic Chemistry.  
A.T. Blomquist and H. Wasserman, eds. 1964-71. Academic Press, 1971-.
316. Organic Nomenclature: A Programmed Study Guide.  
Carl R. Johnson. New York, Worth Publishers, 1976. 130 p. \$40.00.
317. Organic reactions.  
New York, Wiley, v. 1-- 1942--

CHEMISTRY (Cont'd)

BOOKS (Cont'd)

318. Organic synthesis.  
New York, Wiley, v. 1-- 1921-- collective volumes. Annual. 1932-  
published after every tenth annual vol.
319. Physical Chemistry. 4th ed.  
Gordon M. Barrow. McGraw-Hill, New York, 1979. \$23.00.
320. Principles of Biochemistry. 6th ed.  
Abraham White. McGraw-Hill Co., New York, 1978. \$36.50.
321. Principles of Chemistry with Practical Perspective. 2nd ed.  
R.S. Drabo. Allyn and Bacon. Boston, 1977. \$14.20.
322. Progress in analytical chemistry.  
New York, London, Elsevier Press, 1968-. v.1-. illus., tables.
323. Progress in solid state chemistry.  
Oxford, etc. Pergamon Press, 1964-. v.1-. illus., graphs, tables.
324. Quantitative Analysis of Gaseous-Pollutants.  
Walter E. Ruch. Ann Arbor, Mich., Ann Arbor-Humphrey Science, 1970. 241 p.
325. Reagents for Organic Synthesis.  
Louis Frederick Fieser and Mary Fieser. New York, Wiley, 1967-1975. 5v.
326. Reference book of inorganic chemistry. 3rd ed.  
Wendall M. Latimer & Joel H. Hildebrand. New York, Macmillan, 1964.
327. Solubilities of inorganic and organic compounds.  
H. Stephen and T. Stephen, eds. Oxford, [etc.], Pergamon Press, 1963-65.  
2 v. in 4.
328. Tables of physical and chemical constants and some mathematical functions.  
G.W.C. Kaye and T.H. Laby. 14th ed. London, Longmans, 1973. xi, 386 p.  
graphs, tables.
329. Technique of organic chemistry. 2nd-3rd ed.  
A. Weissberger, ed. New York & London, Interscience: Wiley, 1951-  
v.1-. illus., diags., graphs, tables.
330. Techniques for the Retrieval of Chemical Information.  
International Union of Pure and Applied Chemistry, in conjunction with the  
Chemical Society. Edited by A.K. Kent. Oxford, Pergamon, 1978. \$18.75  
121 p. LC 77-26821. ISBN 0-08-021193-3. (Also published in Pure and  
Applied Chemistry, 49 [1977]: 1779-1900).
331. Textbook of petrology.  
London, Allen & Unwin, Thomas Murby, 1978 (new format)-. illus., diags.
332. Textbook of Polymer Science.  
F.W. Billmeyer, 2nd ed., Wiley, 1971.

## CHEMISTRY (Cont'd)

### BOOKS (Cont'd)

333. Thermal Conductivity of the Elements: A Comprehensive Review.  
C.Y. Ho, R.W. Powell and P.E. Liley. New York, published by the American Chemical Society and the American Institute of Physics.
334. Who's Who in Atoms: An International Reference Book. 6th ed.  
London, George G. Harrap; distr. New York, International Publications Service, 1974. 1748 p. in 2 v.

### DICTIONARIES

335. A Dictionary of Alloys.  
Eric N. Simons. New York, Hart, 1970 (c.1969). 191 p.
336. A dictionary of chromatography.  
R.C. Denney. London, Macmillan, 1976. xi, 191 p. diags. £15.
337. A Dictionary of Electrochemistry.  
C.W. Davies and A.M. James. London, Macmillan, 1976. 246 p. ISBN 0-333-19203-6. \$12.00.
338. A Dictionary of Named Effects and Laws in Chemistry, Physics, and Mathematics.  
Denis William George Ballentyne and D.R. Lovett. 3rd ed. New York, Barnes and Noble, 1971. 335 p. illus.
339. A German-English dictionary for chemists. 3rd ed.  
A.M. Patterson. New York, Wiley, 1950. xviii, 541 p. £6.25.
340. A new German-English dictionary for chemists.  
H.H. Neville, and others. London, Blackie, 1964. xviii, 330 p.
341. Concise chemical and technical dictionary.  
H. Bennett, ed. 3rd enl. ed. London, E. Arnold, 1974. xxxix, 1185 p. £24.
342. Concise etymological dictionary of chemistry.  
S.C. Bevan, and others. London, Applied Science Publishers, Ltd., 1976. ix, 140 p. £7.
343. Condensed chemical dictionary.  
Arthur & Elizabeth Rose.
344. Dictionary of biochemistry.  
J. Stenesh. New York, London, etc., Wiley: Interscience, 1975. viii, 344 p. £17.85.
345. Dictionary of chemical names.  
Walter E. Flood. Totowa, N.J., Littlefield, 1967.

CHEMISTRY (Cont'd)

DICTIONARIES (Cont'd)

346. Dictionary of Organic Compounds: The Constitution and Physical Chemical, and Other Properties of the Principal Carbon Compounds and Their Derivatives, Together with the Relative Literature Referenced. 4th completely rev., enl. and re-set ed. New York, Oxford University Press, 1965. 5 v.
347. German-English Dictionary for Chemists. 3rd ed. Austin McDowell Patterson. New York, Wiley, 1950. 541 p.
348. Glossary of organic chemistry, including physical organic chemistry. S. Patal. New York & London, Interscience: Wiley, 1962. xiv, 227 p.
349. Hackh's Chemical dictionary. I. Hackh. (American and British usage, containing the words generally used in chemistry, and many of the terms used in the related sciences of physics, astrophysics, mineralogy, pharmacy, agriculture, biology, medicine; engineering, etc. Based on recent chemical literature. 4th ed., completely revised and edited by Julius Grant. New York, London, [etc.], McGraw-Hill, 1969, xi 738 p. diags.
350. Tables of Standard Electrode Potentials. Guilio Milazzo and Caroli Sergio. Chichester, Wiley, 1978. \$39.95. 421 p. LC 77-8111. ISBN 0-471-99534-7.
351. Technical Dictionary of Chromatography. Hans-Peter Angele. New York, Pergamon, 1970. 119 p.
352. Technical Dictionary of Higher Polymers; Hochpolymers; Hauts Polymers. Vladimir N. Davydov and Howorka Horst. (Title proper in Russian). Oxford, New York, Pergamon Press, 1969. 959 p.
353. The Condensed Chemical Dictionary. 9th edition. Revised by Gessner G. Hawley. New York, Van Nostrand Reinhold, 1977. 1977. 957 p. ISBN 0-442-23240-3. \$34.00.

ENCYCLOPAEDIAS

354. Encyclopedia of Chemical Processing and Design. Edited by John J. McKetta and William A. Cunningham. N.Y., Dekker, 1976-. Multivolume.
355. Encyclopedia of Chemical Reactions. Carl Alfred Jacobson and C.A. Hampel. New York, Reinhold, 1946-59. 8 v.
356. Encyclopedia of Chemical Technology. 3rd ed. New York, Wiley, 1978 - . Multivolume.

CHEMISTRY (Cont'd)

ENCYCLOPAEDIAS (Cont'd)

357. Encyclopedia of Chemistry. 2nd ed.  
George Lindenberg Clark. New York, Van Nostrand Reinhold, 1966. 1144 p.  
illus. index.
358. Encyclopedia of electrochemistry.  
Clifford A. Hampel. New York, Van Nostrand-Reinhold, 1964.
359. Encyclopedia of electrochemistry of the elements...  
A.J. Bard, ed. New York & Basle, Dekker, 1973- . v.1- . tables.
360. Encyclopedia of the alkaloids.  
J.S. Glasby. New York & London, Plenum Press, 1975-77. 3v. (v.1-2.  
\$95).
361. Encyclopedia of Polymer Science and Technology.  
New York, Interscience, 1964-1972. 16 v. illus.
362. Encyclopedies des gas/Gas Encyclopaedia.  
Amersterdam, Elsevier, for L'Air Liquide, 1976. 1150 p. graphs, tables.
363. Kingzett's Chemical encyclopaedia.  
A digest of chemistry & its industrial applications. 9th ed. General  
editor, D. H. Hey, London, Bailliere, Tindall and Cassell, 1966. xi, 692 p.
364. Organic Chemical Process Encyclopedia, 1969. 2nd ed.  
Marshall, Sittig. Park Ridge, N.J., Noyes, 1969. 712 p. illus.
365. The Encyclopedia of biochemistry.  
Roger J. Williams & Edwin M. Landsford Jr., ed. New York, Van Nostrand-  
Reinhold, 1967.
366. The encyclopedia of chemistry. 2nd ed.  
G.L. Clark, ed. New York, Reinhold; London, Chapman & Hall 1966. xxi;  
[1], 1144 p. £14.50.
367. The Encyclopedia of Chemistry. 3rd ed.  
Clifford A. Hampel and G. Hawley Gessner, ed. New York, Van Nostrand  
Reinhold, 1973. 1198 p. illus. index.

HANDBOOKS

368. A Statistical Manual for Chemists. 2nd ed.  
Edward L. Bauer. New York, Academic Press, 1971. 193 p. index.

CHEMISTRY (Cont'd)

HANDBOOKS (Cont'd)

369. Beilstein Handbook fo Organic Chemistry/Beilsteins Handbuch Der Organischen Chemie. Verlag New York, Inc., 175 Fifth Avenue, New York, N.Y. 10010, U.S.A. or Springer-Verlag KG, Abt. 4005, 22 volumes.
370. Chemical technician's ready reference handbook.  
G.I. Shugar and others. New York, London, etc., McGraw-Hill, 1973. xi, [1], 463 p. illus., diagrs., tables. £16.90.
371. CRC Handbook of analytical toxicology.  
Irving Sunshine, ed. Cleveland, Chemical Rubber Co., 1971.
372. CRC Handbook of Chemistry & Physics. 61st ed.  
CRC Press, Inc. Boca Raton, Fla., 33431, 1980. \$28.95.
373. CRC Handbook of Chromatography.  
Gunter Zweig and Joseph Sherma, eds. Cleveland, CRC Press, 1972. 2 v. illus. bibliog. index.
374. CRC Handbook of laboratory safety. 2nd ed.  
Norman V. Steeve, ed. Cleveland, Chemical Rubber, Co., 1970.
375. Guide for Safety in the Chemical Laboratory. 2nd ed.  
Manufacturing Chemists Association. New York, Van Nostrand Reinhold, 1972. 505 p. illus. index.
376. Guide to organic reactions.  
Howard D. Weiss. Minneapolis, Burgess, 1969.
377. Handbook of analytical chemistry.  
L. Meites, ed. New York, London, etc., McGraw-Hill, 1963. [1788]p. tables. £44.65.
378. Handbook of chemistry. 10th ed.  
Norbert A. Lange. New York, McGraw-Hill, 1967.
379. Handbook of Chemistry and Physics. 57th ed.  
Edited by Robert C. Weast. Cleveland, CRC Press, 1976. ISBN 0-87819-456-8. \$29.95.
380. Handbook of Metal Ligand Heats and Related Thermodynamic Quantities.  
James J. Christensen and M. Izatt Reed. Rev. 2nd ed. New York, Marcel Dekker, 1975. index. (Contribution no. 13 from the Center for Thermochemical Studies, Brigham Young University, Provo, Utah).
381. Handbook of Naturally Occurring Compounds, Volume II, Terpenes.  
T.K. Devon and A.I. Scott. New York, Academic Press, 1972. 576 p. illus. index.
382. Handbook of neurochemsitry.  
Abel Lajtha, ed. New York, Plenum, v. 3 & 4, 1970. (proposed 7 v.)

## CHEMISTRY (Cont'd)

HANDBOOKS (Cont'd)

383. Handbook of Organic Electrochemistry.  
Louis Meites and Petr Zuman. Cleveland, CRC Press, 1977. \$127.75.  
(CRC Handbook Series in Organic Electrochemistry). 2 v. LC 77-24273.  
ISBN 0-8493-7220-8.
384. Handbook of organometallic compounds.  
N. Hagihara and others, ed. New York, Amsterdam, Benjamin, 1968.  
xviii, 1044 p. diagrs., tables.
385. Handbook of preparative inorganic chemistry. 2nd ed.  
G. Brauer, ed. New York, Academic Press, 1963-1965. 2 v.
386. Handbook of Reactive Chemical Hazards; An Indexed Guide to Published Data.  
F. Bretherick. London, Butterworths, 1975. 976 p. ISBN 0-408-70643-0.  
\$49.95.
387. Handbook of Solvents.  
J. Mellan, Reinhold, 1957-59.
388. Handbook of the atomic elements.  
R.A. Williams. London, Vision Press, 1971. 124 [1] p. tables. £2.
389. Handbook of the elements. 2nd ed.  
Samuel Ruben. Indianapolis, Ind., Sams, 1967.
390. Handbook of Thermochemical Data for Compounds and Aqueous Species.  
Herbert E. Barner and Richard V. Scheuerman. New York, Wiley, 1978.  
\$19.95. 156 p. LC 77-20244. ISBN 0-471-03238-7.
391. Handbook of Toxicity of Pesticides to Wildlife.  
U.S. Sport Fisheries and Wildlife Bureau. By Richard K. Tucker and D.  
Glen Crabtree. Washington, Government Printing Office, 1970. 131 p.
392. Lange's Handbook of Chemistry. 11th ed.  
John A. Dean, ed. New York, McGraw-Hill, 1973. 1 v. (various paging)  
illus. index.
393. Metals Handbook. 9th ed.  
Volume 1: Properties and Selection: Irons and Steels. Metals Park,  
OH, American Society for Metals, 1978. \$45.00. 793 p. LC 78-14934.  
ISBN 0-87170-007-7.
394. Polymer Handbook. 2nd ed.  
J. Brandup and W. McDowell, eds. New York, Wiley, 1975. 1363 p. \$34.50.
395. The biochemist's handbook.  
C. Long, ed. London, Spon, 1961. xxi, 1192 p. diagrs., tables.
396. The Chemist's Companion: A Handbook of Practical Data, Techniques and Re-  
ferences. Arnold J. Gordon and Richard A. Ford. New York, Wiley, 1972.  
537 p. index.
397. Toxic and Hazardous Industrial Chemicals Safety Manual for Handling and  
Disposal with Toxicity and Hazard Data. Gijustsu Shiryo Kenkyujo Kaigai.  
Tokyo, The International Technical Information Institute, 1975. 591 p.

## EARTH SCIENCES

### ATLASES

398. Atlas of Infrared Spectroscopy of Clay Minerals and Their Admixtures.  
H.W. van der Marel and H. Beutelspacher. Amsterdam, Elsevier, 1976.  
vii, 396 pp. ISBN 0-444-41187-9. LC 76-368465.
399. Atlas of World Physical Features.  
Rodman E. Snead. New York, Wiley, 1972. 158 p. illus. map. bibliog.  
index.
400. International Cloud Atlas.  
Geneva, World Meteorological Organization; distr. New York, Unipub, 1969.  
1 v. (various paging).
401. Serial Atlas of the marine environment.  
American Geographical Society. New York, the Society, 1962-. folio 1-.
402. The Mitchell Beazley atlas of the oceans.  
London, Mitchell Beazley, 1977. 208 p. illus., diags., maps. £4.95.

### BOOKS

403. Advances in oceanography.  
H. Charnock and Sir C. Deacon. New York & London, Plenum Press, 1978.  
viii, 356 p. illus., maps.
404. Advances in hydroscience.  
New York & London, Academic Press, 1964-. v. 1-. illus. Annual.  
(v. 10. 1975. £30.90).
405. Bibliography of earthquake engineering.  
E.P. Hollis. 3rd ed. [Oakland, Calif.], Earthquake Engineering Research  
Institute, 1971. x, 247 p.
406. Chemical oceanography. 2nd ed.  
J.P. Riley and G. Skirrow, eds. New York, London, etc., Wiley, 1975- .  
v.1-. illus., diags., tables.
407. Climatology: fundamentals and applications.  
J.R. Mather. New York, London, etc., McGraw-Hill, 1974. xiii, 412 p.
408. Climatological Data.  
U.S. National Oceanic and Atmosphere Administration. Washington,  
Government Printing Office, 1959- .
409. Deserts of the world: an appraisal of research into their physical and  
biological environments. W.G. McGinnies and other, eds. Tucson, Univ.  
of Arizona Press, [1968]. xxviii p., 788 p. illus., maps.
410. Encyclopedia of Marine Resources.  
Frank E. Firth, ed. New York, Van Nostrand, 1969. 740 p. illus. index.

EARTH SCIENCES (Cont'd)

BOOKS (Cont'd)

411. Geography and cartography: a reference handbook.  
C.B.M. Lock. 3rd ed., rev. and enlarged. London, Bingley, 1976.  
762 p. £15.
412. Geology of petroleum.  
A.I. Levorsen. San Francisco, Freeman, 1954. x, 703 p. illus.,  
diags., tables.
413. Holmes' principles of physical geology.  
3rd ed., rev. by Doris L. Holmes. London, Nelson, 1978. [xv], 730 p.  
illus., diags., geol. maps. £8.50.
414. Hydrological maps: a contribution to the International Hydrological Decade.  
United Nations Educational, Scientific and Cultural Organization. Paris,  
Unesco & World Meteorological Organisation, 1977. 204 p. diags., graphs,  
maps. (Studies and reports in hydrology).
415. Industrial minerals and rocks.  
(nonmetallics other than fuels). Editorial board: Joseph L. Gillson  
[and others]. Sponsered by the Seeley W. Mudd Memorial Fund. 3rd ed.  
New York, American Institute of Mining, Metallurgical and Petroleum Engi-  
neers, 1960. x, 934 p.
416. International meteorological vocabulary...  
World Meteorological Organization. Geneva, Secretariat of the WMO, 1966.  
xvi, 276 p. (WMO/OMM/BMO - No. 182. TP. 91).
417. Introduction to geology.  
E.H. Read and J. Watson. London, Macmillan, 1968-75. 2v. in 3 illus.
418. Jane's Ocean technology, 1976-77.  
Edited by Robert L. Trillo. London, Jane's Yearbook, 1976. [52],  
679 p. illus., tables. (1978. £25.50).
419. League of Arab States: Education, Culture and Sciences Organisation.  
Lexicon of geology, English-French Arabic. Rabat, Morocco, Bureau  
Permanent de Coordination de l'Arabisation, 1971. 238, xiv p.
420. Mineral recognition.  
Iris Vanders & Paul F. Kerrs. New York, Wiley, 1967.
421. Minerals yearbook.  
U.S. Bureau of Mines. Washington, D.C. 1862--
422. Oilfields of the World.  
E.N. Titratsoo. Beaconfield, England, Scientific Press; distr. New York,  
Geology Press, 1973. 376 p. illus. index.
423. Principles of geomorphology.  
W.D. Thornbury. 2nd rev., ed. New York, Wiley; London, Chapman & Hall,  
1969. 604 p. £15.15. £6.55.
424. Principles of Physical Oceanography.  
by G. Neumann and W.J. Peirson. (Prentice-Hall, 1966).

EARTH SCIENCES (Cont'd)

BOOKS (Cont'd)

425. Progress in geography: international reviews of current research.  
London, E. Arnold, 1969-. v.1-. diags., tables, maps. Annual.  
(v.9. 1976. 212 p. £9).
426. Smithsonian meteorological tables.  
Robert J. List. rev. ed. New York, Random (Smithsonian), 1966.
427. Symbols and abbreviations used on charts issued by the Hydrographic  
Department of the Admiralty. Great Britain. Admiralty. London,  
Hydrographic Department. Various dates. 10 sheets.
428. Tables for Microscopic Identification of Ore Minerals.  
by W. Vytenbogaardt and E.A.J. Burke. 2nd ed., Elsevier, 1970.
429. The geology of Africa.  
R. Furon. Translated by A. Hallam and L.A. Stevens. Edingurgh & London,  
Oliver & Boyd, 1963. xii, 377 p. illus., maps.
430. The mineral resources of the sea.  
J.L. Mero. Amsterdam, London, New York, Elsevier, 1965. xii,  
312 p. illus., tables. £8.85.
431. The Nomenclature of Petrology: With References to Selected Literature.  
Arthur Holmes. London, Allen and Unwin, 1920; repr. New York, Hafner,  
1971. 284 p.
432. The ocean basins and margins.  
A.E.M. Nairn and F.G. Stehli, eds. New York & London, Plenum Press,  
1973-. v.1-. illus., maps.
433. The sea: ideas and observations on progress in the study of the seas.  
M.N. Hill, ed. New York & London, Interscience: Wiley, 1962-. v.1- .  
illus., diags., tables, maps.
434. Water and water use terminology.  
J.O. Veatch and C.R. Humphrys. Kaukauna, Wisconsin, Thomas, 1966.  
xvi, 375, [v] p. illus.
435. Water resources research catalog.  
U.S. Office of Water Resources Research. Washington, D.C., U.S.G.  
P.O., 1965--

DICTIONARIES

436. A dictionary of geography: definitions and explanations of terms used in  
physical geography. W.G. Moore. 4th ed. Harmondsworth, Middlesex.  
Penguin Books, 1968. 234 p. ill. (incl. pl.), diagra., graphs, maps.
437. A dictionary of geology. 5th ed.  
J. Challinor. Cardiff, Univ. of Wales Press, 1978. xvii, 365 p.  
£6.50.

EARTH SCIENCES (Cont'd)

DICTIONARIES (Cont'd)

438. A Dictionary of Mining, Mineral and Related Terms.  
compiled by Paul W. Thrush and published in 1968. Bureau of Mines, United States Department of the Interior.
439. A glossary of geographical terms; prepared by a Committee of the British Association for the Advancement of Science. 2nd ed. Sir L.D. Stamp, ed. London, Longman, 1966. 570 p. £8.
440. Dictionary of applied geology, mining and civil engineering.  
A. Nelson and K.D. Nelson. London, Newnes, 1967. vii, 421 p. diags.
441. Dictionary of geography. 2nd ed.  
Francis J. Monkhouse. Chicago, Aldine, 1970.
442. Dictionary of geography.  
W.G. Moore. New York, Praeger, 1967.
443. Dictionary of geology. 4th ed.  
John Challinor. New York, Oxford Univ. Press, 1971.
444. Dictionary of geological terms.  
American Geological Institute. New York, Doubleday (Dolphin), 1969.
445. Dictionary of hydrogeology.  
Hans-Olaf Pfannkuch. In three languages: English, French and German.  
New York, American Elsevier, 1969.
446. Dictionary of Physical Metallurgy: In English, German, French, Polish, Russian. Eugenusz F. Tyrkiel. Amsterdam, Elsevier Scientific, 1977.  
DM 175,000. 402 p. ISBN 0-444-99810-1.
447. Elsevier's dictionary of hydrogeology in three languages, English, French, German... H.O. Pfannkuch. Amsterdam, London, New York, Elsevier, 1969.  
[xii], 168 p. £3.50.
448. Geological dictionary... English, Polish, Russian, French, German.  
R. Zylka. Warsaw, Wydawnictws Geologiczne, 1970. 1430 p.
449. Glossary of geographical terms. 2nd ed.  
L. Dudley Stamp. New York, Wiley, 1966.
450. Glossary of geographical and topographical terms.  
Alexander Knox. Detroit, Gale Research Co., 1968.
451. Glossary of Geology and Related Sciences.  
Edited by Margaret Gary, Robert McAfee, Jr., and Carol L. Wolf. 3rd ed.  
American Geological Institute. Washington, the Institute, 1972. 805 p.
452. Glossary of mapping, charting and geodetic terms. 2nd ed.  
United States. Department of Defense. Defense Mapping Agency Topographic Center. Washington, 1969. 281 p. (3rd ed. 1973).
453. Glossary of Meteorology.  
Boston, American Meteorological Society, 1959. 638 p.

EARTH SCIENCES (Cont'd)

DICTIONARIES (Cont'd)

454. Glossary of oceanographic terms. 2nd ed.  
U.S. Naval Oceanographic Office. Washington, D.C., 1966. (Special Pub. SP-35.)
455. Index of Generic Names of Fossil Plants, 1820-1965.  
By Henry N. Andrews, Jr: U.S. Geological Survey. Washington, Government Printing Office, 1970. 354 p.
456. International dictionary of geophysics.  
Edited by S.K. Runcorn, and others. Seismology, geomagnetism, aeronomy, oceanography, geodesy, gravity, marine geophysics, meteorology, the earth as a planet and its evolution. Oxford, [etc.], Pergamon Press, 1967: 2 v. (xi, 784; xi, 785-1728 p.). illus., diagrs., charts, maps.
457. Meteorological glossary. 5th ed.  
Compiled by D.H. McIntosh. London, H.M. Stationery Office, 1972. [iv], 319 p. illus. 9 pl.). diagrs., maps, tables. 2.75. Great Britain. Meteorological Office.
458. International Dictionary of Metallurgy, Mineralogy, Geology, and the Mining and Oil Industries: English, French, German, Italian. Angel Cagnacci-Schwicker. Milan, Technoprint International, 1968; repr. New York, McGraw-Hill, 1970. 1550 p.
459. Multilingual dictionary of technical terms in cartography.  
International Cartographic Association. Commission II. Wiesbaden, Steiner Verlag GmbH, 1973. lxxxiii, 573 p. maps. DM98.
460. Russian-English glossary of physics of fluids and meteorology.  
S. Noveck. New York, Interlanguage Dictionaries Publishing Corp., 1959. [iii], 93 p. \$10.
461. Standard Dictionary of Meteorological Sciences: English-French/French-English. Gerald J. Proulx. Montreal and New York, McGill-Queen's University Press, 1971. 307 p. bibliog.
462. The Penguin dictionary of geology.  
D.G.A. Whitten and J.R.V. Brooks. London, Allen Lane, 1978. 495, [2] p. illus., diagrs., tables. £5.95.
463. Webster's geographical dictionary.  
Merriam Co. Rev. ed. Springfield, Mass., Merriam, 1967.

ENCYCLOPAEDIAS

464. Encyclopedia of Earth Science Series.  
Rhodes Whitmore Fairbridge, ed. New York, Van Nostrand Reinhold, 1966. (in progress). 4v. Vol. 1, Encyclopedia of Oceanography. 1966. 1021 p.; Vol. 2, Encyclopedia of Atmospheric Sciences. 1967. 1200 p.; Vol. 3, Encyclopedia of Geomorphology. 1968. 1295 p.; Vol. 4a, Encyclopedia of Geochemistry and Environmental Sciences. 1972. 1321 p.

EARTH SCIENCES (Cont'd)

ENCYCLOPAEDIAS (Cont'd)

465. Encyclopedia of oceanography.  
New York, Van Nostrand-Reinhold, 1966.
466. Illustrated encyclopedia of the mineral kingdom.  
A. Woolley, ed. London, Hamlyn, 1978. 240 p. col. illus. £5.95.
467. Inorganic chemical and metallurgical process encyclopedia.  
M. Sittig. Park Ridge, N.J., Noyes Development Corpn., 1968. 883 p. illus., diags.
468. Standard encyclopedia of the world's oceans and islands.  
A. Huxley, ed. London, Weidenfield & Nicolson, 1962. 383 p. illus. (incl. 16 col. pl.), maps.
469. Standard encyclopedia of the world's rivers and lakes.  
R.K. Gresswell and A. Huxley. London, Weidenfield & Nicolson, 1966. 384 p. illus. (pl.), maps.
470. The collector's encyclopedia of rocks and minerals.  
A.F.I. Deeson, ed. New York, Polter (distributed by Crown), 1973; Newton Abbot, Devon, David & Charles, 1975. 288 p. col. illus., tables. £5.95.
471. The Encyclopedia of Geochemistry and Environmental Sciences.  
Rhodes W. Fairbridge. New York. Van Nostrand Reinhold, 1972. 1321 p. illus. index.
472. The Encyclopedia of geomorphology.  
New York, Van Nostrand-Reinhold, 1968. (Encyclopedia of Earth Sciences Series, v. 3.)
473. The Encyclopedia of marine resources.  
Frank E. Firth, ed. New York, Van Nostrand-Reinhold, 1969.
474. The encyclopedia of minerals and gemstones.  
M. O'Donoghue, ed. London, Orbis, 1976. 304 p. col. illus. £7.95.
475. The encyclopedia of oceanography.  
R.W. Fairbridge, ed. New York, Reinhold, 1966. 1056 p. illus. (incl. pl.), diags., tables, maps. (Encyclopedia of earth sciences, v.1). £14.60.

EARTH SCIENCES (Cont'd)

ENCYCLOPAEDIAS (Cont'd)

476. The encyclopedia of sedimentology.  
R.W. Fairbridge and J. Bourgeois, eds. Stroudsburg, Pa., Dowden,  
Hutchinson & Ross, 1978. xvi, 901 p. illus., tables, maps. (Encyclopedia  
of earth sciences, v.6).
477. The new Larousse encyclopedia of the earth.  
L. Bertin. Rev. ed. London, Hamlyn, 1972. 424 p. illus.
478. The Planet We Live On: An Illustrated Encyclopedia of the Earth Sciences.  
Edited by Cornelius S. Hurlbut, Jr. New York, Harry N. Abrams, 1976. 527 p.  
ISBN 0-8109-0415-2. LC 75-29977. \$37.50.
479. The Water encyclopedia.  
David Keith Todd. Port Washington, N.Y., Water Information Center, Inc.,  
1971.

HANDBOOKS

480. CRC Handbook of marine science.  
Editor, F.G. Walton Smith, Cleveland, Ohio, CRC Press, 1974. 2v. [viii],  
627 p.; [xi], 390 p.). graphs, tables, maps.
481. CRC handbook of tables of functions for applied optics.  
By L. Levi. Cleveland, Ohio, Chemical Rubber Co., 1974 [x], 624 p.  
tables. \$19.95.
482. Dana's Manual of Mineralogy. 18th ed.  
Cornelius S. Hulbut, Jr. New York, Wiley, 1971. 579 p. illus.
483. Earth science manual. 3rd ed.  
Edward E. Lyon. Dubuque, Iowa, W.C. Brown, 1971. c1964.
484. Field manual: an introduction to the megascopic study & determination of  
of minerals & rocks. K.M. Pohopien. Dubuque, Iowa, Wm. C. Brown, 1969.
485. Handbook of applied hydrology; a compendium of water resources technology.  
Ven-Te Chow, ed. New York, McGraw-Hill, 1964.
486. Handbook of geochemistry.  
K.H. Wedepohl et al, eds. New York, Springer-Verlag, 1968. 2 v.
487. Handbook of meteorological instruments.  
Great Britain. Meteorological Office. London, H.M. Stationery Office,  
1956-61. 2v. pl., diags., tables. (Met. O. 577).

EARTH SCIENCES (Cont'd)

HANDBOOKS (Cont'd)

488. Handbook of ocean and underwater engineering.  
John J. Myers, ed. New York, McGraw-Hill, 1969.
489. Handbook of oceanographic tables, 1966.  
Washington, D.C., U.S.G.P.O., 1967.
490. Handbook of the rare elements.  
M.A. Filyand and E.I. Semenova. London, Macdonald, [1968] - 0.  
3v tables.
491. Handbook of world salt resources.  
S.J. Lefond. New York, Plenum Press, 1969. xxiii, 384 p. maps, tables,  
charts.
492. International stratigraphic guide: A guide to stratigraphic classification,  
terminology and procedures. H.D. Hedberg, ed. London, Wiley, 1976. xvii,  
200 p. illus.
493. Observer's handbook. 3rd ed.  
Great Britain. Meteorological Office. London, H.M. Stationery Office,  
1969. viii, 242 p. illus. (incl. pl.), (Met O. 805). £3.75.

PHYSICS & MECHANICS

ATLAS

494. Atlas of Carbon-13 NMR Data.  
E. Breitmaier, G. Hass and W. Voelter. London, Heyden, 1975. Loose-leaf.  
ISBN 0-85501-161-0. \$49.50.
495. Atlas of Optical Transforms.  
G. Harburn, C.A. Taylor and T.R. Welberry. London, G. Bell and Sons, 1975.  
32 plates plus 33 pages of text. ISBN 0-7135-1760-3. \$15.00.
496. The particle atlas; an encyclopedia of techniques for small particle identification. 2nd ed. W.C. McCrone and J.C. Deliy. Ann Arbor, Mich., Ann Arbor Science Publishers, Inc., 1973. 4v. (1138 p.). illus., diags., graphs, tables. £88, the set.

BOOKS

497. Advances in cryogenic engineering.  
New York & London, Plenum Press, 1960-. v.1-. illus., diags. Annual.  
(v.23. 1978. \$48.50).
498. Advances in geophysics.  
New York & London, Academic Press, 1952-. v.1-. illus. Annual (v.19  
1976. £23.10).
499. Advances in high pressure research.  
London & New York, 1966-. v.1-. (v.4 1973. 297 p. £9).
500. An Introduction to Plasma Physics. 2nd ed.  
W.B. Thompson. Addison-Wesley Publishing Co., Reading, Mass., 1964.  
\$23.10.
501. Atomic and Nuclear Physics.  
J. Yarwood (1973). University Tutorial Press.
502. Basic data for plasma physics. 2nd ed.  
S.C. Brown. Cambridge, Mass. & London, M.I.T. Press, 1967. viii,  
312 p. diags.
503. Color science: concepts and methods, quantitative data and formulas.  
G. Wszechki and W.S. Stiles. New York, London, [etc.], Wiley, 1967.  
xiv, [1], 628 p. tables, graphs, charts.
504. Electricity and magnetism.  
by C.J. Smith (3rd ed., Edward Arnold, 1963).
505. Electricity and magnetism.  
by J. Yarwood (University Tutorial Press, 1973).
506. Electromagnetic Fields.  
Ronald K. Wangsness. J. Wiley & Sons. New York, 1979. \$24.95.

PHYSICS & MECHANICS (Cont'd)

BOOKS (Cont'd)

507. Introduction to high energy physics.  
D.H. Perkins. Addison-Wesley.
508. Magnetism.  
G.T. Rado and H. Suhl, eds. New York & London, Academic Press, 1963-.  
v.1-. illus., diags., tables.
509. Mechanical Properties.  
F.H. Wohlbier, ed. Bay Village, Ohio, Trans Tech Publications, vol. 1-,  
1975 -. Semi-annual. \$112.00 per year.
510. Noise and Vibration Control.  
Leo L. Beranek, ed. New York, McGraw-Hill, 1971. 650 p. illus. index.
511. Optics.  
Miles V. Klein. Wiley. New York, 1970.
512. Physical laws and effects.  
C.F. Hix, Jr., and R.P. Alley. New York, Wiley; London, Chapman & Hall,  
1958. 291 p. illus.
513. Physics. 2nd edition.  
Anther Beiser. Benjamin/Cummings Co., 1978.
514. Physics and the earth. 2nd ed.  
F.D. Stacey. London, Wiley, 1977. ix, 414 p. illus., diags.
515. Physics Parts 1 & 2.  
David Halliday. Robert Resnick Wiley, 1978.
516. Principles of optics: electromagnetic theory of propagation, interference.  
M. Born and F. Wolf.
517. Quantum Mechanics. Vol. 2.  
Claude Tannoudji. J. Wiley & Sons. New York, 1977. \$17.15.
518. Spacetime Physics.  
Taylor/Wheeler. W.H. Freedman & Co., San Francisco, 1966. \$9.00.
519. Streams: Their Dynamics and Morphology.  
by M. Morisawa. (McGraw-Hill, 1968).
520. Thermophysical Properties of Matter.  
New York, IFI/Plenum, Volume 11. Viscosity. Edited by Y.S. Louloukian,  
S.C. Saxena, and P. Hestermans. 1975. 643 p. ISBN 0-306-67031-3. \$65.00.  
Volume 12. Thermal Expansion.

PHYSICS & MECHANICS (Cont'd)

DICTIONARIES

521. A dictionary of physical sciences.  
J. Daintith, ed. London, Macmillan Press, 1976. [v], 333 p. tables.  
£5.95.
522. A Dictionary of Spectroscopy.  
R.C.A. Denney. New York, Wiley, 1973. 161 p. illus. (A Halsted Press Book).
523. A dictionary of thermodynamics.  
A.M. James. London, Macmillan Press, 1976. xi, 262 p. diagrs., graphs,  
tables, £12.
524. Concise dictionary of physics and related subjects.  
J. Thewlis. Oxford, etc., Pergamon Press, 1973. viii, 361 p. tables.  
£10.
525. Dictionary of Named Effects and Laws. 3rd ed.  
Chapman and Hall, 1970.
526. Dictionary of nuclear physics & technology.  
R. Sube. (English-French-German-Russian). Elmsford, N.Y., Pergamon, 1969.
527. Dictionary of nuclear science & technology.  
W.E. Clason. New York, American Elsevier, 1970. Russian Supplement, 1,  
1970.
528. Dictionary of pure and applied physics.  
L. DeVries and W.E. Clason, comp. Amsterdam, London, [etc.], Elsevier,  
1963-64. 2v.
529. Dictionary of Physics.  
H.J. Gray and Alan Isaacs. (Longmans, 2nd ed. 1975).
530. Dictionary of physics: multilingual glossary. vol. 9.  
A.R. Meetham. Elmsford, N.Y., Pergamon, 1969.
531. Encyclopedia dictionary of physics.  
J. Thewlis, ed. General, nuclear, solid state, molecular, chemical, metal  
and vacuum physics, geophysics, biophysics and related subjects. Oxford,  
London, Pergamon Press. 1961-64. 9v. illus., diagrs. Supplementary v.  
1-5. 1966-75. £140, the set.
532. Glossary of terms frequently used concerning accelerators.  
American Institute of Physics. New York, the Institute, [1964]. [7],  
22, [3] p.
533. Glossary of terms frequently used in biophysics.  
American Institute of Physics. New York, the Institute, [1963]. [8], 21 p.
534. Glossary of terms frequently used in cloud physics.  
American Institute of Physics. New York, the Institute, 1966. [viii].  
40, [1] p.

PHYSICS & MECHANICS (Cont'd)

DICTIONARIES (Cont'd)

535. Glossary of terms frequently used in space physics.  
compiled by Patrick Thaddeus. American Institute of Physics. New York,  
the Institute, [1963]. [1], 18, [1] p.
536. International dictionary of geophysics.  
S.K. Runcorn, ed.
537. International Dictionary of Physics and Electronics. 2nd ed.  
Princeton. Van Nostrand, 1961. 1355 p. illus.
538. McGraw-Hill dictionary of Scientific and Technical terms.  
1974.
539. Russian-English physics dictionary.  
I. Emin and others. New York & London, Wiley, 1963. xxx, 554 p. £10.50.
540. The British Colour Council dictionary of colour standards...  
British Colour Council. London, the Council, 1934. 2v. (2nd ed. 1961.  
3 pts.).

ENCYCLOPAEDIAS

541. Atomic energy encyclopedia in the life sciences.  
Charles W. Shilling, ed. Philadelphia, Saunders, 1964.
542. Concise encyclopedia of the atom.  
Paul Musset and Antonio Lloret. Chicago, Follett, 1968.
543. Encyclopedia of cybernetics, tr. from the German Lexicon der Kybernetik.  
By G. Gilbertson. New York, Barnes & Noble, 1968.
544. Encyclopedia of physics.  
Robert M. Besancon. New York, Van Nostrand-Reinhold, 1966.
545. McGraw-Hill Encyclopaedia of Science and Technology. 3rd ed.  
McGraw-Hill, 1971.
546. The encyclopedia of geomorphology.  
R.W. Fairbridge, ed. New York, London, etc., Reinhold, 1968. xvi, 1295 p.  
illus., diagrs., tables, maps: (Encyclopedia of earth sciences series, v.3).
547. The encyclopedia of physics. 2nd ed.  
R.M. Besancon, ed. New York, Van Nostrand Reinhold, 1974. xv, 1067 p.  
illus., diagrs., tables. \$37.50.
548. The encyclopedia of spectroscopy.  
G.L. Clark, ed. New York, Reinhold; London, Chapman & Hall, 1960.  
xvi, 787 p. illus., diagrs.

PHYSICS & MECHANICS (Cont'd)

ENCYCLOPAEDIAS (Cont'd)

549. The encyclopedia of microscopy and microtechniques.  
P. Gray, ed. New York, London, etc., Van Nostrand Reinhold, 1973. xi,  
638 p. illus., diags., graphs, tables. £28.35.

HANDBOOKS

550. American Institute of Physics handbook. 3rd ed.  
Co-ordinating editor, Dwight E. Gray. New York, the Institute, 1972.  
[2342] p. illus., tables. \$49.50.
551. CRC Handbook of Chemistry and physics: a ready reference book of chemical  
and physical data. 58th ed. 1977-78. Editor, Robert C. Weast. Cleveland,  
Ohio, CRC Press, 1977. v.p. tables, charts.
552. CRC Handbook of lasers with selected data on optical technology.  
Robert J. Pressley. Cleveland, Chemical Rubber Co., 1971.
553. Handbook of elementary physics.  
N. Koshkin & M. Shirkevich. (Tr. by F. Leib), New York, Gordon & Breach,  
1965.
554. Handbook of fuel cell technology.  
C. Berger, ed. Englewood Cliffs, N.J., Prentice-Hall, 1968. xv, 607 p.  
illus. (pl.), tables, diags.
555. Handbook of fluid dynamics.  
V.L. Streeter, ed. New York, Toronto, London, McGraw-Hill, 1961. [1198] p.  
illus., diags., tables.
556. Handbook of physical calculations.  
J. Tuma, ed. New York, London, etc., McGraw-Hill, 1976. x, 370 p.  
diags., tables. \$14.95.
557. Handbook of physical constants.  
S.P. Clark, Jr., ed. Rev. ed. New York, Geological Society of America,  
1966. 587 p. tables. (Geological Society of America. Memoir 97).
558. Handbook of physics. 2nd ed.  
E.U. Condon. New York & London, McGraw-Hill.
559. Handbook of Sensory Physiology. v. 1-.  
Werner R. Loewenstein. New York, Springer-Verlag, 1971-. illus. index.
560. Handbook of thermodynamic tables and charts.  
K. Raznjevic. New York, Hemisphere Publishing Corpn.: McGraw-Hill,  
1976. viii, 392 p. tables, charts. £22.15.

PHYSICS & MECHANICS (Cont'd)

HANDBOOKS (Cont'd)

561. Handbook of thermophysical properties of solid materials.  
A. Goldsmith, and others. Oxford, etc., Pergamon Press, 1961-63. 5v.  
Loose-leaf.
562. Handbook of unusual natural phenomena.  
W.R. Corliss, comp. Glen Aron, Md., The Sourcebook Project, 1977. [vi],  
542 p. illus.
563. Handbook of X-ray analysis of polycrystalline materials.  
Lev I. Mirkin. New York, Plenum (IFI), 1964.
564. Infrared band handbook.  
H.A. Szymanski and R.E. Erickson. New York, London, [etc.], IFI/Plenum.  
1970. 2v. (1491 p.).
565. Methuen handbook of colour. 2nd ed.  
A. Kornerup and J.H. Wanscher. London, Methuen, 1967. 243 p. illus.  
(col. pl.). (3rd ed. 1978. 252 p. £7.50).
566. Physics pocketbook.  
Hermann Ebert, ed. New York.
567. Shock & vibration handbook. 2nd ed.  
C.M. Harris and C.E. Crede, eds. New York, London, etc., McGraw-Hill,  
1976. [1025] p. diagrs., graphs, tables. £24.40.

**PHYSICAL SCIENCES  
ABSTRACTS & INDEXES**

ABSTRACTS AND INDEXES

568. Abstracts in Anthropology, 1970-.  
Greenwood Periodicals. Quarterly.
- Arrangement: By broad subject areas in anthropology. Within each area, abstracts are arranged alphabetically by senior author with cross references from joint authors.
- Coverage: Archaeology, ethnology, linguistics, physical anthropology. Author and subject indexes.
- Scope: International.<sup>1</sup>
569. Acoustics Abstracts, v. 1-. 1967-.  
Brentwood, Essex, Multi-Science Publishing Co., 6 issues a year.
- About 1,200 abstracts a year. Covers vibration, shock, audio frequencies, ultrasonics, noise, physiological, psychological aspects of sound and bioacoustics. Annual indexes by author and subject.<sup>2</sup>
570. Amino Acid Peptide and Protein Abstracts, 1972-.  
Information Retrieval, Ltd. Monthly.
- Arrangement: By subject. Some broad areas subdivided into more narrow topics. Within sections abstracts are ordered alphabetically according to peptide and protein names.
- Coverage: Major aspects of amino-acid, peptide and protein chemistry surveyed. The isolation, purification and structure of peptides and proteins are included, together with solution studies and peptide synthesis. The section on enzyme action covers all papers dealing with pure proteins or purified extracts.<sup>1</sup>
- Scope: International. Author and annual subject indexes.
571. Analytical Abstracts, 1954-.  
Society for Analytical Chemistry. Monthly (two volumes per year). Supersedes BRITISH ABSTRACTS, Ser. C., Analysis and Apparatus (1944-1953).
- Arrangement: Broad subject areas subdivided into narrower topics.
- Coverage: Deals with all branches of analytical chemistry; general analytical chemistry, inorganic chemistry, organic chemistry, food, agriculture, air, water, effluents, techniques, apparatus, chromatography, ion exchange, electrophoresis, optical, electrochemistry, radiochemistry, thermal analysis, particle size analysis. Monographs, reports, conference proceedings and symposia included.
- Scope: International.<sup>1</sup>

ABSTRACTS AND INDEXES

(Continued)

572. Astronomy and Astrophysical Abstracts, v. 1-. 1969-.  
Berlin, Springer. Semiannual.

Successor to *Astronomischer Jahresbericht* (5-5), the Abstracts retain all the former's scholarly features. Coverage remains international though the editorial apparatus is in English. Time lag in reporting is up to eight months. Titles of entries are given in the language of the author, with English translations whenever possible; titles of Russian papers are always given in English. Abstracts are written in English, French, or German; authors' abstracts are used by preference. The arrangement is by a classification scheme of 108 categories, including sections for periodicals, proceedings, books, and activities in addition to the specific subjects. In the serial numbering of the abstracts the first three numerals identify the entry's location in the classification. Six categories are subdivided by specific names: observatories, institutes; societies, organizations; solar eclipses; comets; novae; and supernovae. Entries with limited relevance to astronomy or astrophysics are listed without abstracts. Author and subject indexes. For astrophysics a much more selective service is available: *Astrophysical Abstracts* (Glasgow, Gordon and Breach, Science Publications, Aug. 1969-; v. 1-).<sup>2</sup>

573. Astrophysical Abstracts, 1969-.  
New York: Gordon and Breach.<sup>3</sup>

Volume 1 consisted of over 400 abstracts under broad categories. Author and subject indexes.

574. Bibliography and Index of Geology, 1969-. \$750 per annum (USA, Canada & Mexico). \$765 (all other countries).

Falls Church, Va.: American Geological Institute. Monthly.

Succeeds *Bibliography of North American Geology* (US Geological Survey, 1931-72), which included literature 1785-1970), and *Bibliography and Index of Geology Exclusive of North American* (Geological Society of America, published in 32 v. 1933-68). The major source for an academic geology library, providing access to geological literature, including books, maps, monographs, etc. Arranged under 29 fields of interest: 01. Mineralogy and crystallography - 02. Geochemistry - 03. Geochronology - 04. Extraterrestrial geology - 05/06. Petrology - 07. Marine geology and oceanography - 08/11. Paleontology - 12. Stratigraphy, historical geology paleoecology - 13/14. Areal geology - 15. Miscellaneous and mathematical geology - 16. Structural geology - 17/20. Geophysics - 21. Hydrogeology

## ABSTRACTS AND INDEXES

(Continued)

and hydrology - 22. Engineering and environmental geology - 23/25. Surficial geology - 26/29. Economic geology. Each issue has subject and author indexes, cumulated annually. The major indexing service for geology. The Bibliography is derived from GeoRef, a data base produced at the American Geological Institute in conjunction with the Bibliography. The Institute has issued GeoRef serials list and KWOC (1978. 13 fiches) and GeoRef Thesaurus and Guide to Indexing (1978. x, 456p. \$35).<sup>2</sup>

575. British Geological Literature, v. 1-. 1964-.  
Borune End, England: Coredon Press. Quarterly.

About 1,200 references a year. Author arrangement with subject indexes. Limited to geological articles published in Great Britain.<sup>3</sup>

576. Chemical Abstracts: Key to the World's Chemical Literature, v. 1-. 1907-.  
Columbus, Ohio: American Chemical Society.

Undoubtedly the most comprehensive scientific abstracting service in English. Issued weekly, the descriptive abstracts are arranged in 80 sections grouped under the following five broad headings: biochemistry; organic chemistry; macromolecular chemistry; applied chemistry and chemical engineering; metallurgy; physical and analytical chemistry. Every other week abstracts treat biochemistry and organic chemistry; alternate weeks deal with the remaining three groups. CA selectively abstracts this impressive array of source materials. Over 12,000 scientific and engineering journals, patents from 26 countries, conference proceedings, reports and monographs are monitored. Over 55 percent of this material is in English, with the rest in any one of 55 other languages.

Computers are used extensively in the production of CA. For each primary document that is selected for inclusion in the data base, the following information is handled: bibliographic data; abstract; keyword phrases; index entries; chemical structures. From this data base information are produced the abstract issues, issue indexes, volume indexes (made up of substance, general subject, formulae, author, patent concordance, and numerical patent), five-year collective indexes, and computer-readable files. There is also a union catalog, the Source Index (7-12).<sup>2</sup>

ABSTRACTS AND INDEXES

(Continued)

577. Chemical Titles, v. 1-. 1960-.  
Columbus, Ohio: American Chemical Society. Biweekly.

A computer-produced KWIC index to the tables of contents of over 700 international chemical periodicals. It usually tries to list titles of articles during the month in which the journal carrying the article appears. The first part is the KWIC index, the second part a bibliography of all the periodicals indexed in the issue arranged by the title of the periodical. Author index. Chemical Titles is thus a current awareness service; abstracts of the same articles and papers usually follow their announcement here within several months.<sup>2</sup>

578. Chemo-Reception Abstracts, 1973-.  
London: Information Retrieval. Quarterly.

International coverage of areas such as psychophysics, neuro-anatomy, peripheral and central sensory mechanisms, etc. Includes book notices and notifications of proceedings. Author indexes and cumulative subject indexes.<sup>3</sup>

579. CINDA 74: An Index to the Literature on Microscopic Neutron Data, 2v., 1 supplement. 1974-.

Vienna: International Atomic Energy Agency; distr. New York.

This two-volume compilation with its first supplement contains bibliographic references to measurements, calculations, and evaluations of neutron cross-sections and other microscopic data. It contains over 100,000 bibliographic extracts compiled from scientific journals, report series, conference proceedings, and unpublished material. The material is entered first by element and mass number, then by cross-section or other quantity. For each of these the following is given: type of work (experimental, theoretical, etc.); type of reference (journal, report, etc.); energy range of incident neutrons; reference citations; laboratory; comments; and numerical data. This compilation is the result of worldwide cooperation through the U.S. Energy Research and Development Administration; USSR Nuclear Data Centre; NEA Neutron Data Compilation Centre at Soclay, France; and IAEA Nuclear Data Section at Vienna.<sup>2</sup>

ABSTRACTS AND INDEXES

(Continued)

580. Current Abstracts of Chemistry and Index Chemicus, v. 1-. 1960-. Philadelphia, Pa.: Institute for Scientific Information. Weekly.

The first 35 volumes were called Index Chemicus. This computer-produced abstracting service "contains abstracts of articles reporting the synthesis, isolation, and identification of new compounds, and of articles reporting new chemical reactions or syntheses." The index portion is weekly, cumulating quarterly and annually. It contains molecular formulae and author, subject, and journal indexes.<sup>2</sup>

581. Current Physics Advance Abstracts, 1972-. New York: AIP. Monthly.

The key word in this title is "advance." It signifies that the service provides abstracts of papers which have only been accepted for publication, thus giving physicists approximately four months forewarning of papers to be published. To offer such a service, the AIP has obviously enlisted special cooperation from the editors of its 70 core journals.<sup>2</sup>

582. Current Physics Microform. Monthly.

Available by annual lease in 16mm cartridges. At present the microform series does not include all of the 70 core journals, but the ultimate goal is to do so. The 16mm cartridges and frame numbers are noted on the SPIN tapes.

Obviously, despite its many advantages—most notably the speed with which new scientific developments are disseminated—the AIP's program cannot compete with Physics Abstracts and Nuclear Science Abstracts for comprehensiveness of coverage. The latter services include within their universes of indexible matter major publication categories omitted entirely by AIP: technical reports, conference proceedings, translations, patents, and dissertations. Nonetheless, it is almost a certainty that physics libraries will be compelled to subscribe to at least a portion of AIP's services.<sup>2</sup>

583. Current Physics Titles, 1972-. New York: AIP. Monthly.

Issued in three sections: "solid state," "nuclei and particles," and "atoms and waves." Each section is further subdivided by precise subject headings.<sup>2</sup>

ABSTRACTS AND INDEXES

(Continued)

584. Desalination Abstracts, 1967-.  
Tel-Aviv: Center of Scientific and Technological Information.  
Monthly.

Approximately 800 abstracts annually on the scientific and economic aspects of water desalination. Covers wide range of primary literature. Arranged according to universal decimal classification system. Name, subject, and patent number indexes.<sup>3</sup>

585. Electroanalytical Abstracts, 1963-.  
Birkhauser Verlag. Bi-monthly.

Bears subtitle: International Journal Dealing with the Documentation of all Aspects of Electroanalytical Chemistry Including Fundamental Electrochemistry. Continues the abstract section of the Journal of Electroanalytical Chemistry.

Arrangement: By broad subject.

Coverage: Documents all aspects of fundamental physicochemical and analytical electrochemistry. The abstracted papers are divided into the following classes; Fundamental Electrochemistry, Apparatus, Voltammetry, Polarography, Amperometry, Potentiometry, Conductometry, Electroanalysis, Coulometry, Electrophoresis, Other Methods, Related Topics, Book Reviews and New Books. Author and annual cumulated classified indexes.

Scope: International.<sup>1</sup>

586. Geo Abstracts, 1966-.  
Norwich, England; Geo Abstracts. Bi-monthly.

Formerly Geographical Abstracts, 1966-1971. The basic abstract journal for geography. Arranged by subjects, with each section available separately. Complete citation and brief abstracts. Comprehensive annual indexes. Sections:

- A. Landforms and the quaternary
- B. Climatology and hydrology
- C. Economic geography and cartography
- E. Sedimentology
- F. Regional and community planning
- G. Remote sensing, photogrammetry and cartography.<sup>3,4</sup>

ABSTRACTS AND INDEXES

(Continued)

587. Geophysical Abstracts: Abstracts of Current Literature Pertaining to the Physics of the Solid Earth and to Geological Exploration, 1929-.  
Washington, D.C.: U.S. Geological Survey. Monthly.
- Worldwide bibliographic coverage of literature pertaining to the physics of the solid earth and to geophysical exploration. Nearly 2,500 indicative and informative abstracts. Sections: age determination, earth structural (general), electrical methods, gravity, heat and heat flow, magnetics, theology, seismology, tectonics, volcanology, well logging. Annual author and subject indexes. Available on magnetic tape. All abstracts are in English.<sup>3,4</sup>
588. Geotechnical Abstracts, 1970-.  
Essen, Deutsche Gesellschaft fur Erd-und Grundbau, [for] International Society for Soil Mechanics and Foundation Engineering. Monthly. DM 320 pa. Card ed. available.
- English ed. of Dokumentation Bodenmechanik und Grundbau.
- 144 informative and indicative abstracts per month; 8 12 1/2 x 7 1/2 cm. cards per sheet. Section: A. General - B. Engineering geology - C. Site investigations - D. Soil properties. Laboratory and field determinations - E. Analysis of soil engineering problems - F. Rock properties. Laboratory and field determinations - G. Analysis of rock-engineering problems - H. Design, construction and behaviour of engineering works - K. Construction methods and equipment - S. Snow and ice mechanics and engineering. No monthly indexes, but annual author index. Over 500 journals and conference proceedings covered.
- Geotechnical Abstracts succeeds Geodex Soil Mechanics Information Service (Sonoma, Calif., Geodex International Institute, 1962-72) which covered the literature up to 1969.<sup>4</sup>
589. International Aerospace Abstracts, v. 1-, no. 1-. 1961-.  
New York: Technical Information Service/American Institute of Aeronautics and Astronautics, for the Scientific and Technical Information Office, NASA. Semi-monthly (January & July - 3 issues each). \$400 pa (US), \$550 (other countries).
- Replaces abstracts in Aero/Space Engineering (formerly Aeronautical Engineering Review), 1942-60.

ABSTRACTS AND INDEXES

(Continued)

About 45-50,000 indicative and informative abstracts pa.

Coverage: Periodicals (including government-sponsored), books, meetings, papers, conference proceedings, translations of journals and journal articles. (For abstracts and indexes of report literature, see Scientific and Technical Aerospace Reports (STAR).) Classified 01-99: 0. Aeronautics - 1. Astronautics - 2. Chemistry and materials - 3. Engineering - 4. Geosciences - 5. Life sciences - 6. Mathematical and computer sciences - 7. Physics - 8. Social sciences - 9. General. Indexes: subject; personal author; contract number; meeting paper and report number index; accession number index, per issue, quarterly and annually. A basic abstracting service.<sup>4</sup>

590. International Petroleum Abstracts, 1969-.  
Applied Science Publishers, Ltd. Quarterly. Formerly: Institute of Petroleum Abstracts, 1969-1972.

Arrangement: By broad subjects subdivided into narrower topics.

Coverage: Oilfield exploration and exploitation, transport and storage, refinery operations, products, corrosion, engines and automotive equipment, safety, economics and marketing, education and training and miscellaneous information. Author annual subject indexes.

Scope: International.<sup>1</sup>

591. Journal of Current Laser Abstracts, 1967-.  
Institute for Laser Documentation. Monthly. Formerly: Laser/Master International, 1964-66.

Arrangement: By broad subjects subdivided into narrower topics.

Coverage: Laser theory, design and application. Includes periodicals, conference proceedings, government reports, patents, dissertations, books, etc. Author and annual subject indexes.

Scope: International.<sup>1</sup>

592. Laser Abstracts, v. 1-. 1963-.  
Evanston, Ill.: Lowry-Croft Abstracts. Weekly.

Comprehensive coverage of articles, patents, reports, and papers of proceedings on the subject. Intended primarily for specialized collections.<sup>3</sup>

ABSTRACTS AND INDEXES

(Continued)

593. Metals Abstracts, v. 1-. 1968-.  
London: Institute of Metals, and Metal Park, Ohio: American Society for Metals. Monthly. 220 pa (industrial organizations; 120 pa, libraries).  
  
Results from the merger of ASM Review of Metal Literature (1944-67) and Metallurgical Abstracts (1909-67), both monthly.  
  
About 24,000 indicative and informative abstracts pa, drawing on over 1,000 journals, plus books, reports, and conference 31. Mechanical properties... 34. Chemical and electrochemical properties... 53. Machinery... 55. Finish. Author index per issue.  
  
Metals Abstracts Index is a monthly supplement of Metals Bulletin, - author and subject indexes supplied only to subscribers to the Abstracts; cumulated annually.<sup>4</sup>
594. Meteorological and Geostrophysical Abstracts, v. 1-. 1950-.  
Washington, D.C.: American Meteorological Society. Monthly.  
  
Volumes 1-10 entitled Meteorological Abstracts and Bibliography. Provides current abstracts on primary sources. Citations include author, abstracts, decimal classification, subject headings, etc. The major abstracting service of its kind. Author, subject, and geographic indexes. Six main sections: meteorology, astrophysics, physical oceanography, hydrosphere/hydrology glaciology, environmental sciences.<sup>3,4</sup>
595. Mineralogical Abstracts, v. 1-, no. 1-. 1920-.  
London: Mineralogical Society of Great Britain and the Mineralogical Society of America. Quarterly. 30 pa.  
  
Previous to 1959, published in The Mineralogical Magazine. 1978: 5,300 indicative and informative abstracts, and references. 18 sections: A-Z subjects (Age determination - Apparatus and techniques - Book notices... Geochemistry... Mineral data... Petrology...). Annual author and subject indexes.<sup>4</sup>
596. Nuclear Science Abstracts, v. 1-. 1948-.  
Washington, D.C.: Energy Research and Development Administration. Twice monthly.  
  
Prior to February 15, 1975, the issuing agency was the Atomic Energy Commission. The Abstracts of Declassified Documents, which appeared from July 1947 to June 1948, is considered as the

## ABSTRACTS AND INDEXES

(Continued)

beginning of the Nuclear Science Abstracts. In the cumulative report number index, this is considered as volume one, even though there is another volume one that begins with July 1948. NSA covers the international literature on nuclear science and technology that appears in the technical reports of the Energy Research and Development Administration and its contractors, technical reports of other U.S. government agencies as well as other governments; of foreign and domestic universities and research laboratories. Patents, books, conference papers, periodical articles, dissertations, and translations issued throughout the world are also abstracted. Each entry gives the issuing agency, title, author, date, pagination, report number, language if not English, and abstract. There are corporate, personal author, subject, and report number indexes in each issue. There are also cumulative indexes. The report number index also gives the availability of the report: whether automatically assigned to a depository library, available at cost from NTIS, or published in some source, which is indicated.

There are 21 main headings in NSA, each of which is minutely subdivided. Chemistry, Controlled Thermonuclear Research, Engineering, Environmental and Earth Sciences, Instrumentation, Isotope and Radiation Source Technology, Life Sciences, Materials, Nuclear Materials and Waste Management, Particle Accelerators, Physics (Astrophysics and Cosmology), Physics (Atmospheric), Physics (Atomic and Molecular), Physics (Electrofluid and Magnetofluid), Physics (High-Energy), Physics (Low-Temperature), Physics (Nuclear), Physics (Radiation and Shielding), Physics (Theoretical), Reactor Technology and Regulation, General and Miscellaneous.

The heading "Life Sciences" is subdivided as follows: Radiation Effects on Biochemicals; Radiation Effects on Cells; Radiation Effects on Micro-Organisms; Radiation Effects on Plants; Radiation Effects on Animals: Man, Vertebrates, Invertebrates; Radionuclide Effects (Internal Source): Man, Animals; Nuclide Kinetics and Toxicology; Man, Animals; New Tracer Techniques.

The heading "Environmental and Earth Sciences" comprises these component subfields: Minerals and Ores; Radioactive Effluents; Radioactivity Monitoring and Transport: Atmosphere, Soil, Ecosystems and Food Cycles; Radiometric Techniques; Site Surveys; Thermal Effluents; Chemical Effluents.

These specifications are sufficient to suggest the far-ranging ramifications of nuclear science, a special science which, although it grew out of physics, now impinges on most of the sciences practiced today.<sup>2</sup>

## ABSTRACTS AND INDEXES

(Continued)

597. Nucleic Acids Abstracts, 1971-.  
London; Information Retrieval. Monthly.
- Covers the primary literature of the science of nucleic acids. Arranged by broad subjects and subdivided into narrower categories. Author and annual subject indexes.<sup>3</sup>
598. Petroleum Abstracts, 1961-.  
University of Tulsa, College of Petroleum Sciences and Engineering.  
Department of Information Service. Weekly.
- Arrangement: By broad subjects subdivided into narrower topics. May also be divided geographically when this is indicated.
- Coverage: Covers broadly the literature of petroleum and related information, including exploration, development and production, geology, geochemistry, geophysics, well logging, completion and servicing, production, storage, shipping and supplemental technology. Includes meeting papers, patent journals, etc. Indexes:
- (1) Alphabetic Subject Index Description and Searching Procedure
  - (2) Alphabetic Subject Section
  - (3) Bibliographic Information
  - (4) Author Index
  - (5) Patent Index<sup>1</sup>
599. Physics Abstracts, v. 1-. 1898-.  
London: Institution of Electrical Engineers. Fortnightly.
- Physics Abstracts is Section A of Science Abstracts, of which the other two sections are; Electrical and Electronics Abstracts, B (discussed in Chapter 11, Engineering); and Computer and Control Abstracts, C (discussed in Chapter 4, Mathematical Sciences).
- The only abstracting service which systematically covers the complete domain of modern physics. The documents abstracted are all the primary sources; articles, reports, translations, patents, conference papers; and books published in all languages of the world.
- More than 85,000 items per year are abstracted. Abstracts are short and descriptive. There is a subject and author index in each issue which cumulates every six months. An added feature not present in many abstracting journals is the indication of the author's affiliation.

## ABSTRACTS AND INDEXES

(Continued)

Arrangement of abstracts is in accordance with the following ten decimally divided main headings. The tenth, Interdisciplinary Subjects, is given in full to show the extent to which physics impinges on other disciplines. 1) General Physics Topics; 2) Mathematical and General Theoretical Physics; 3) Electromagnetism and Optics; 4) Quantum Field Theory and Elementary Particle Physics; 5) Nuclear Physics; 6) Atomic and Molecular Physics; 7) Gases, Fluid Dynamics, and Plasmas.<sup>2</sup>

600. Rheology Abstracts, A Survey of World Literature, 1958-. Pergamon Press, Ltd. Quarterly. Supersedes the abstracting section of the British Society of Rheology Bulletin.

Arrangement: By broad subjects subdivided into narrower topics.

Coverage: All aspects of the subject including theories, instruments and techniques, solids, polymers and other viscoelastic materials, solutions, pastes and suspensions, liquids and general information. Annual author and subject indexes.

Scope: International.<sup>1</sup>

601. Scientific and Technical Aerospace Reports (STAR), v. 1-, no. 1-, 1962-. Washington, D.C.: Scientific and Technical Information Office, National Aeronautics and Space Administration (NASA). Semi-monthly. \$66.90 pa (domestic); \$83.65 (foreign). Cumulative index issues: \$28.10 (domestic); \$35.15 (foreign). Also available on microfiche: \$45 (domestic); \$60 (foreign).

About 30,000 indicative and informative abstracts pa. Main divisions (01-99): Aeronautics - Astronautics - Chemistry and materials - Engineering - Geosciences - Life sciences - Mathematical and computer sciences - Physics - Social sciences - Space sciences. Indexes: subject; personal author; corporate source; contract number; report/accession number index per issue, quarterly, semi-annual and annual. A companion service to International Aerospace Abstracts (qv), and equally indispensable to the researcher.<sup>4</sup>

ABSTRACTS AND INDEXES

(Continued)

602. Science Research Abstracts, v. 1-. 1973-.  
Riverdale, Md.; Cambridge Scientific Abstracts. 10/yr. (for each part).  
  
Part A; Superconductivity; MHD (Magnetohydrodynamics), Plasmas, Theoretical Physics and Superconductivity Research.  
  
Part B: Laser and Electrooptic Reviews-Quantum Electronics. Indexing all primary publication forms, the two parts together yield circa 32,000 abstracts a year. Each issue of each part contains subject and author indexes. Subject access is further facilitated by bountiful cross references. Cumulated annual author-subject indexes are also available as is a special "Particle Index" for Part A.<sup>2</sup>
603. Solid State Abstracts, v. 1-. 1960-.  
Cambridge, Mass.; Cambridge Communications Corp. Quarterly.  
  
A comprehensive abstracting index to materials on its subjects. Sources include all primary documents as well as books. Obviously designed for libraries and practitioners with an exclusive interest in this subfield of physics.<sup>2</sup>
604. Solid State Physics Literature Guides, v. 1-. 1970-.  
New York; Plenum.  
  
These bibliographies are based mainly on papers received by the Research Materials Information Center of the Oak Ridge National Laboratory. In general, coverage is from 1960, although individual volumes may deviate from this by a year or two. Volumes cover such topics as ferroelectric materials and ferroelectricity; semiconductors-preparation, crystal growth and selected properties; groups IV, V, and VI transition metals and compounds; electrical properties; and scattering of thermal neutrons. The usefulness of these guides is enhanced by a permuted title subject index, an author index, an organization index, a patent index, and a report number index.<sup>2</sup>
605. Spectrochemical Abstracts, 1933-1937.  
Adam Hilger, Ltd. Annual since 1962/63; prior to that time, one volume covered several years.  
  
Arrangement: By broad subjects subdivided into narrower topics.

## ABSTRACTS AND INDEXES

(Continued)

Coverage: All aspects of spectrochemistry including substance analyzed, apparatus, methods, and basic theory. Includes a section on books and reviews. Author index and index of elements.

Scope: International.<sup>1</sup>

606. Theoretical Chemical Engineering Abstracts, 1964-.  
Columbus, Ohio: Chemical Abstracts.

Six issues a year; one issue covers two months.

Arrangement: By broad subjects subdivided into narrower topics.

Coverage: All aspects of theoretical chemical engineering including fluid dynamics, heat transfer, mass transfer, kinetics and thermodynamics, chemical reactor engineering, design, control, physical separation, crushing pumps, compressors, monographs and general information. Also covers books, government reports, conference proceedings, etc. Annual subject index.

Scope: International.<sup>1</sup>

607. Zentralblatt Fur Geologie und Palaontologie, 1950-.  
E. Schweizerbart'sche Verlagsbuchhandlung. Irregular.

Appears in two sections: Teil I, Allgemeine, Angewandte, Regionale und Historische Geologie; Teil II, Palaontologie. The title evolved as follows: Geologisches Zentralblatt, 1901-1942. Abteilung A, Geologie, Abteilung B, Palaontologie, (also called Palaontologisches Zentralblatt). In 1943 merged with Neues Jahrbuch fur Mineralogie, Geologie und Palaontologie, Referate (abstracting section) to become Zentralblatt fur Mineralogie, Geologie und Palaontologie, 1943-1949. In 1950 the Zentralblatt split into two sections: Zentralblatt fur Geologie und Palaontologie and the Zentralblatt fur Mineralogie.

Arrangement: By broad subject headings. Some issues consist of summaries of the literature on certain subjects with long bibliographies attached. For example: "Fortschritte in der regionalen Geologie Argentiniens 1963-1969 by Wolfgang Volkheimer" (Teil I, Heft 1/2, pp 75-130, Sept. 1971) is such an article. The issues or parts of an issue are bibliographies of recent articles and books with each citation having an abstract.

Coverage: All aspects of geology and paleontology.

Scope: International.<sup>1</sup>

ABSTRACTS AND INDEXES

(Continued)

608. Zentralblatt fur Mineralogie, 1950-.  
E. Schweizerbart'sche Verlagsbuchhandlung. Irregular.

Supersedes in part Zentralblatt fur Mineralogie, Geologie und Palaontologie, whose varied history is recounted in the previous entry. In 1943 superseded the Referate component of the Neues Jahrbuch fur Mineralogie, Geologie, und Palaontologie.

Arrangement: By broad subjects subdivided into narrower topics.

Coverage: All aspects of mineralogy. Includes publications of societies and institutions and books, etc.

Scope: International.<sup>1</sup>

## REFERENCES

1. Abstracts and Indexes in Science and Technology: A Descriptive Guide.  
Dolores B. Owen and Marguerite M. Hanchey. Metuchen, New Jersey: The Scarecrow Press, 1974.
2. Science and Engineering Literature.  
H. Robert Malinowsky, et al. Littleton, Colorado: Libraries Unlimited, 1976.
3. Scientific and Technical Information Science.  
Ching-Chih Chen. Cambridge, Massachusetts: MIT Press, 1977.
4. Walford's Guide to Reference Material. Volume I: Science and Technology.  
Fourth edition. Edited by A.J. Walford. London: The Library Association, 1980.

**MATHEMATICAL SCIENCES  
REFERENCE BOOKS**

MATHEMATICS, STATISTICS, COMPUTER SCIENCE

BOOKS

609. APL, An interaction approach. 2nd ed.  
Leonard Gilman. Wiley-New York, 1976.
610. APL programming and computer techniques.  
Harry Katzan. New York, Van Nostrand, 1970. 329 p.
611. Advances in applied mechanics.  
New York, London, etc., Academic Press, 1948-. v.1-. Annual (irregular).
612. An Introduction to Programming. 3rd ed.  
Richard Conway and David Gries. Winthrop Publishers. Massachusetts, 1979.
613. An index of mathematic tables. 2nd ed.  
A. Fletcher, and others, ed. Oxford, Blackwell, for Scientific Computing Service, Ltd., 1962. 2v.
614. Assembly Language Fundamentals.  
Yarmish & Yarmish. Addison-Wesley, Reading, Mass., 1979. \$17.95.
615. Barlow's Tables of squares, cubes, square roots, and reciprocals of all integers up to 12,500. 4th ed., edited by L.J. Comrie. London, Spon 1941. xii, 258 p. £2.
616. Basic. A hands-on method.  
Herbert D. Peckman. McGraw-Hill, New York, 1978. \$10.95.
617. Basic, Basic Programming.  
Anthony T. Peluso and others. Addison-Wesley Publishing Co. Reading, Massachusetts, 1972. \$11.75.
618. Basic Computer Programs in Science & Engineering.  
Jules H. Gilder. Hyden-Rochell Park, N.J., 1980. \$8.95.
619. Basic Computer Programs for the home.  
Charles D. Sternberg. Hayden-Rochell Park, N.J., 1980. \$8.95.
620. Basic mathematics for electronics. 3rd. ed.  
Nelson M. Cooke and Herbert F.R. Adams. New York, McGraw-Hill, 1970.
621. Basic mathematics for the biological and social sciences.  
Francis Henry Charles Marriott. Elmsford, N.Y., Pergamon, 1970.
622. Basic programming.  
John G. Kemeny. New York, Wiley, 1971. 150 p.
623. Basic programming for Business.  
Thomas V. Dock. West Publishing Company. St. Paul, Minn., 1977. \$7.95.
624. Business Programming in Fortran IV.  
Nesa L. Wu. W.C. Brown & Co. Publishers, Dubuque, Iowa, 1977. \$11.95.

MATHEMATICS, STATISTICS, COMPUTER SCIENCE (Cont'd)

BOOKS (Cont'd)

- 625. Circuit Design of Digital Computers.  
by J.K. Hawkins (Wiley, 1968).
- 626. COBOL for Beginners.  
Thomas Worth. Prentice Hall, Inc. Englewood Cliffs, N.J., 1977. \$13.95.
- 627. Computer Aided Decision Making.  
by G.K. Chacko. (Elsevier, 1972).
- 628. Computer - Aided Network Design.  
by D.A. Calahan (McGraw-Hill, 1972).
- 629. Computer Algorithms.  
Sara Baase. Addison-Wesley, 1978. London.
- 630. Computer data processing and programming.  
Thomas Gildersleeve. Englewood Cliffs, N.J., Prentice-Hall, 1970. 170 p.
- 631. CRC standard mathematical tables. 24th ed.  
Editor of mathematics and statistics, W.H. Beyer. Cleveland, Ohio,  
Chemical Rubber Co., 1976 [xi], 565 p. tables, diags.
- 632. Development of computer-based production systems.  
A.K. Kochhar. Halsted, a div. of Wiley, 1979. 274 p.
- 633. Digital Computer Design.  
by F.G. Heath (Oliver and Boyd, 1969).
- 634. Digital Computer Fundamentals. 4th ed.  
Thomas C. Bartee. McGraw-Hill. New York, 1977.
- 635. Digital Computer Principles and Applications.  
by A.G. Fauret (Van Nostrand, 1972).
- 636. Digital Logic and Computer Design.  
M. Morris Mano. Prentice-Hall. New Jersey, 1979.
- 637. Digital Networks and Computer Systems.  
by T.L. Booth (Wiley, 1971).
- 638. Digital Systems Fundamentals.  
J. Motil. (McGraw-Hill, 1972).
- 639. Digital Systems Hardware Organization and Design. 2nd ed.  
Frederick J. Hill and Gerald R. Peterson. Wiley, New York, 1978.
- 640. Disciplines in Combinational and Sequential Circuit Design.  
R.M.M. Oberman (McGraw-Hill, 1970).
- 641. Distributed Information Systems.  
Harry Katzan, Jr. Petrocelli Books, 1979.

MATHEMATICS, STATISTICS, COMPUTER SCIENCE (Cont'd)

BOOKS (Cont'd)

- 642. Electronic Analog to Digital Conversions.  
by H. Schmid (Van Nostrand Reinhold, 1970).
- 643. Electronic Computer Technology.  
by N.R. Scott (McGraw-Hill, 1970).
- 644. Elementary computer applications in science, engineering, and business.  
Ian Barrodale, Frank D.K. Roberts and Byron L. Ehle. New York, Wiley, 1971.  
254 p.
- 645. Elementary probability theory with stochastic processes. 3rd ed.  
Kai Kai Chung. Springer-Verlag, 1979. 325 p.
- 646. Encyclopedia of Computer Science.  
Anthony Ralston, ed. Van Nostrand Reinhold, New York, 1976.
- 647. Fortran - A structural disciplined style.  
Gorden B. Davis. McGraw-Hill, New York, 1977. \$14.95.
- 648. Fundamentals of Microcomputer Architecture.  
Keith L. Poty. Matrix Publishers. Portland, 1979.
- 649. Hybrid Computation.  
Z. Nenadal and B. Mirtes. I. Liffe, 1968).
- 650. Information Retrieval: computational and theoretical aspects.  
H.S. Heaps. Academic Press, 1978. 344 p.
- 651. Introduction to Computers. 3rd ed.  
Gordon B. Davis. McGraw-Hill, 1977.
- 652. Introduction to Computer Science.  
C.W. Gear. Science Research Associates, 1973.
- 653. Introduction to Digital Computer Design.  
H.S. Sobel (Addison-Wesley, 1970).
- 654. Introduction to Mathematical Statistics.  
by P.G. Hoel. (2nd ed., Wiley, 1954).
- 655. Introduction to Microprocessors Software, Hardware Programming.  
Lance A. Leventhal. Prentice-Hall, New Jersey, 1978.
- 656. Introduction to Switching Theory and Logical Design.  
by F.J. Hill and G.R. Peterson (Wiley, 1968).
- 657. Introduction to the theory of nonparametric statistics.  
Ronald H. Randles. Wiley, 1979. 450 p.

MATHEMATICS, STATISTICS, COMPUTER SCIENCE (Cont'd)

BOOKS (Cont'd)

658. Introduction to the theory of Statistics.  
by A.M. Mood and F.A. Graybill (2nd ed. McGraw-Hill, 1963).
659. Introductory COBOL.  
Dennie Van Tassel. Holden-Day, Inc. San Francisco, 1980. \$14.50.
660. Lexicon of mathematics: English-French-Arabic.  
League of Arab States: Education, Culture and Sciences Organization.  
Rabat, Morocco, Bureau Permanent de Coordination de l'Arabisation, 1971.  
192, xxiv p.
661. Linear Sequential Circuits.  
by A. Gill (McGraw-Hill, 1966).
662. Mathematical methods of physics. 2nd ed.  
Jon Mathews & R.L. Walker. New York, W.A. Benjamin, 1970.
663. Mathematical preparation for general chemistry.  
William L. Masterton. Philadelphia, Saunders, 1970.
664. Mathematical tables.  
British Association for the Advancement of Science. Under the auspices  
of the Royal Society, Cambridge, Univ. Press, 1931-52. 10 v.
665. Methods of Correlation and Regression Analysis.  
M. Exekiel and K.A. Fox (3rd ed., Wiley, 1959).
666. Microprocessor Software Design.  
Max J. Schindler. Hayden Book Co. New Jersey, 1980.
667. Microprocessors and Small Digital Computer Systems for Engineers and Scientists.  
Granino A. Korn. McGraw-Hill. New York, 1977.
668. Pascal - user manual & report.  
Kathleen Jensen. Springer-Verlag. New York, 1970. \$7.90.
669. PL/I programming for engineering and science.  
David R. Stoutemyer. Englewood Cliffs, N.J., Prentice-Hall, 1971. 363 p.
670. Principles of Computer Design.  
Alfred V. Aho and Jeffrey D. Ullman. Bell Telephone Laboratories, 1979.
671. Principles of Digital Communication and Coding.  
Andrew J. Viterbi and Jim K. Omura. McGraw-Hill. New York, 1979.
672. Probability and Statistical inference.  
J.G. Kalbfleisch. Springer-Verlag, 1979. 2v. illus.
673. Probability Theory, independence, interchangeability, martingales.  
Yuan-Shih Chow. Verlag, 1978. 455 p.

MATHEMATICS, STATISTICS, COMPUTER SCIENCE (Cont'd)

BOOKS (Cont'd)

674. Problem Solving Using Pascal.  
Kenneth L. Bowles. Springer-Verlag, New York, 1977. \$9.80.
675. Programming a micro-computer.  
Caxton L. Foster. Addison-Wesley Publishing Co., Reading, Mass., 1978.  
\$8.95.
676. Programming for minicomputer.  
John Charles Ciuley. Crane, Russale, 1978. 275 p.
677. Programming Language with structured programming. 3rd ed.  
Frank Bates. Prentice-Hall, Inc. Englewood Cliffs, N.J., 1975. \$14.95.
678. Programming Standard COBOL.  
Winchung A. Chai. Academic Press. New York, 1976. \$11.95.
679. Programming systems and languages.  
Saul Rosen. New York, McGraw-Hill, 1966. 734 p. (McGraw-Hill  
computer Science series).
680. Robust Statistical methods.  
William J.J. Rey. Springer-Verlag, 1979. 128 p.
681. Sampling Techniques.  
W.G. Cochran. (Wiley, 1963).
682. Shift Register Sequences.  
by S.W. Golomb. (Holden Day, 1967).
683. Software Engineering.  
Randal W. Jensen and Charles C. Tonies. Prentice-Hall. New Jersey, 1979.
684. Statistical tables for mathematicians, engineers, economists and the be-  
havioural and management sciences. H.R. Neave. London, Allen & Unwin,  
1978. 87, [1] p. tables. £1.50.
685. Statistical Tables for Science.  
J. Murdoch and J.A. Barnes. Engineering, Management and Business Studies.  
2nd ed. New York, Halsted Press (Wiley), 1973 (c. 1970). 40 p.
686. Statistics: An Introduction.  
by D.A.S. Fraser (Wiley, 1958).
687. Structural Programming and problem solving with Pascal.  
Richard E. Kieburzt. Prentice-Hall, Inc. Englewood Cliffs, N.J., 1978.  
\$12.95.
688. System/360 Job Control Language.  
Gary D. Brown. J. Wiley & Sons, Inc. New York, 1970. \$15.00.

MATHEMATICS, STATISTICS, COMPUTER SCIENCE (Cont'd)

BOOKS (Cont'd)

689. System 370 Job Control Language.  
Gary D. Brown. J. Wiley & Sons, Inc. New York, 1977. \$13.50.
690. System 360/370 Job Control Language and the Access Method.  
Reino Hannula. Addison-Wesley Pub., Reading, Mass., 1978. \$11.95.
691. Survival Probabilities the goal of risk theory.  
Hilary L. Seal. Wiley, 1979.
692. Switching and Finite Automata Theory.  
by Z. Kohavi (McGraw-Hill, 1970).
693. System Simulation.  
by G. Gordon. (Prentice-Hall, 1969).
694. Tables of integrals, series and products.  
I.S. Gradshteyn and I.M. Ryzhik. 4th ed prepared by Yu. V. Geronimus [and] M. Yu Tseytlin. Translated from the Russian by Scripta Technica, Inc. Translation edited by Alan Jeffrey. New York & London, Academic Press, 1965. xiv, 1086 p. \$14.
695. The Advanced Theory of Statistics.  
by M.G. Kendall and A. Stuart. (Griffin, vol. 1, 2nd ed., 1963; vol. 2, 2nd ed., 1967; vol. 3, 1966)
696. The International dictionary of physics and electronics. 2nd ed.  
Princeton, N.J., Van Nostrand, 1961. 1355 p.
697. The structure of computers and computations.  
David J. Kuck. Wiley, 1978. 611 p.
698. Ultrasonic engineering.  
J.R. Frederick. New York & London, Wiley, 1965. 379 p.

HANDBOOKS

699. A Guide to Algol Programming.  
Daniel D. McCrackier. John Wiley & Sons. New York, 1962. \$11.50.
700. A Guide to Fortran IV Programming.  
Daniel D. McCrackier. J. Wiley & Sons, Inc., 1977. New York. \$14.95.
701. A Guide to PL/M Programming for Micro computer Applications.  
Daniel D. McCrackier. Addison-Wesley, Reading, Mass., 1978. \$9.95.
702. A Practical Guide to Algol 68.  
Frank G. Dagan. John Wiley & Sons, Inc. New York, 1978. \$11.50.

MATHEMATICS, STATISTICS, COMPUTER SCIENCE (Cont'd)

HANDBOOKS (Cont'd)

703. Computer Dictionary and Handbook. 2nd ed.  
Charles J. Sippl and Charles P. Sippl. Indianapolis, Howard W. Sams,  
1972. 778 p. illus.
704. \*Computer Handbook for Senior Management.  
Douglas B. Hoyt, ed. LC 77-74855. (Illus.). 1978. 18.95 (ISBN  
0-02-468030-3). Macmillan Info.
705. Computer Languages: A Practical Guide to the Chief Programming Languages.  
Peter C. Sanderson. New York, Philosophical Library, 1970. 200 p.  
index.
706. \*Computer User's Yearbook, 1978. 10th ed.  
LC 78-617411. 1978. 50.00 (ISBN 0-902908-09-X). Intl. Pubns. Serv.
707. \*Computerist's Handy Manual.  
Clayton Hallmark. (Illus.). 1979. pap. 2.25 (ISBN 0-8306-1107-X,  
1107). TAB Bks.
708. CRC Handbook of Tables for Mathematics. 4th ed.  
Cleveland, Chemical Rubber Co., 1970. 1120 p.
709. CRC Handbook of tables for probability and statistics.  
2nd ed. edited by W.H. Beyer, Cleveland, Ohio, Chemical Rubber Co.,  
1968. xiv, 642 p.
710. Guide to Tables in Mathematics Statistics.  
Joseph Arthur Greenwood and H.O. Hartley. Princeton, N.J., Princeton  
University Press, 1962. 1014 p. diags.
711. Handbook of applied mathematics: selected results and methods.  
C.E. Pearson, ed. New York, London, etc., Van Nostrand Reinhold, 1974.  
xiii, 1265 p. illus., graphs, tables. £24.40.
712. Handbook of engineering mechanics.  
W. Flugge, ed. New York, London, McGraw-Hill, 1962. [1632] p. diags.  
\$38.25.
713. Handbook of Mathematics.  
L. Kuipers and R. Timman, eds. Translated by I.N. Sneddon. New York,  
Pergamon, 1969. 782 p. (International Series of Monographs in Pure and  
Applied Mathematics, v. 99).
714. Handbook of mathematical formulae for engineers and scientists.  
B.R. Bartlett and D.J. Fyfe. London, Denny Publications, Ltd., 1974. [ix].  
216 p. tables. £2.25.
715. Handbook of Mathematical Functions: With Formulas, Graphs and Tables.  
U.S. National Bureau of Standards. Rev. ed. Washington, Government Prin-  
ting Office, 1971. 1046 p.

MATHEMATICS, STATISTICS, COMPUTER SCIENCE (Cont'd)

HANDBOOKS (Cont'd)

716. Handbook of mathematical tables and formulas. 5th ed.  
R.S. Burington. New York, London, etc., McGraw-Hill, 1973. x, [2],  
500 p. diagrs., tables. £6.70.
717. Handbook of Microprocessors, Microcomputers and Minicomputers.  
John D. Lenk. Prentice Hall, New Jersey, 1979.
718. Handbook of non parametric statistics.  
John E. Walsh. New York, Van Nostrand-Reinhold, 1962-1968. 3 v.
719. Handbook of numerical matrix inversions and solutions of linear equations.  
Joan R. Westlake. New York, Wiley, 1968.
720. Handbook of numerical methods & applications.  
L.G. Kelly. Reading, Mass., Addison-Wesley, 1967.
721. Handbook of Numerical inversion of Laplace transforms.  
V.I. Krylov & N.S. Skoblya. (Tr. by D. Louvish). Hartford, Conn.,  
Davey, 1969.
722. Handbook of probability and statistics, with tables. 2nd ed.  
R.S. Burington and D.C. May. New York, London, etc., McGraw-Hill, 1970.  
xiv, 462 p. tables. £12.55.
723. Handbook of statistical tables.  
D.B. Owen. Reading, Mass., Addison-Wesley Publishing Co., Inc.; London,  
Pergamon Press, 1962. xii, 580 p. tables.
724. Mathematical handbook for scientists and engineers: definitions, theorems, and  
formulas for reference and review. G.A. Korn and T.M. Korn. 2nd enl. and  
rev. ed. New York, London, [etc.], McGraw-Hill, 1968. xvii, [1], 1130 p.  
tables. £29.65.
725. Mathematics Manual: Methods and Principles of the Various Branches of  
Mathematics for Reference, Problem Solving, and Review. Frederick S.  
Merritt. New York, McGraw-Hill, 1962. 378 p.
726. \*Simple, a Software Handbook of Statistical Techniques.  
J.R. Alonso. 1978 pap. text ed. 10.95. (ISBN 0-88408-100-1). Sterling  
Swift.
727. \*Small Computer Systems Handbook.  
Sol Libes. 1978. pap. 8.45 (ISBN 0-8104-5678-8). Hayden.
728. Software Reliability Guidebook.  
Robert L. Glass. Prentice-Hall, New Jersey, 1979.

ENCYCLOPAEDIAS

729. Condensed computer encyclopedia.  
Philip B. Jordian. New York, McGraw-Hill, 1969.
730. Encyclopaedic dictionary of mathematics for engineers and applied scientists.  
I.N. Sneddon. Oxford, etc., Pergamon, 1976. viii, 800 p. diags., tables. £45.
731. \*Encyclopedia of Acronyms for Library, Information & Computer Sciences.  
Pauline M. Vaillancourt. 1979. 35.00 (ISBN 0-8352-1152-5). Bowker.
732. \*Encyclopedia of Computer Science.  
Anthony Ralston, ed. 1976. 60.00 (ISBN 0-442-80321-4). Van Nos Reinhold
733. \*Encyclopedia of Computer Science & Technology.  
Jack Belzer. Vol. 9. 1978. 88.00 (ISBN 0-8247-2209-4). Dekker.
734. \*Encyclopedia of Computers & Data Processing.  
Vol. 1. 45.00 (ISBN 0-686-05015-0). Mgmt. Info. Serv.
735. The Universal encyclopedia of mathematics.  
London, Allen & Unwin, 1964. 715 p. diags., tables. (Pap., 1977. £1.50).
736. The VNR concise encyclopedia of mathematics.  
W. Gellert and others, eds. New York, etc., Van Nostrand Reinhold, 1977. 760 p. illus. (pl.), port. £12.75.
737. Universal Encyclopedia of Mathematics.  
Foreword by James R. Newman. New York, Simon and Schuster, 1969. 598 p. diags. tables.

DICTIONARIES

738. A Dictionary of computers.  
Anthony Chandor. Baltimore, Md., Penguin, 1970.
739. A dictionary of statistical terms. 3rd ed.  
M.G. Kendal and W.R. Buckland. Edinburgh & London, Oliver & Boyd, 1971. ix, 166 p. £7.
740. \*Computer Dictionary. 2nd ed.  
Donald D. Spencer. LC 78-31738. 1979. 9.95 (ISBN 0-89218-037-4); pap. 5.95 (ISBN 0-89218-038-2). Camelot Pub.
741. \*Computer Terms: A Running Press Glossary.  
John Prenis. LC 77-343. (Orig.). 1977. 11b. bdg. 9.80 (ISBN 0-914294-75-X); pap. 2.50 (ISBN 0-914294-76-8). Running Pr.
742. \*Computerist's Handy Databook-Dictionary.  
Clayton Hallmark. (Illus.). 1979. pap. 3.95 (ISBN 0-8306-1069-3, 1069). TAB Bks.

MATHEMATICS, STATISTICS, COMPUTER SCIENCE (Cont'd)

DICTIONARIES (Cont'd)

743. \*Data Dictionary Systems.  
J.D. Lomax. (Illus.). 1977. pap. 27.50x (ISBN 0-85012-191-4). Intl.  
Pubns. Serv.
744. Dictionary for computer languages.  
Hans Breuer. Automatic Programming Information Center. New York, Academic  
Press, 1966. (Studies in Data Processing, v. 6).
745. Dictionary of Mathematical Sciences.  
Leo Joseph Herland. 2nd ed. rev. and enl. New York, Ungar, 1965. 2 v.
746. Dictionary of mathematics.  
C.C. Baker. New York, Hart, 1966.
747. Dictionary of Mathematics.  
T. Alaric Millington and William Millington. New York, Barnes and Noble,  
1971 (c. 1966). 259 p.
748. Dictionary of Physics and Mathematics Abbreviations, Signs, and Symbols.  
D.D. Polon. DPMA. New York, Odyssey Press, 1965. 333 p.
749. Dictionary of Symbols of Mathematical Logic.  
R. Feys and F.B. Fitch, eds. Amsterdam, North Holland Publishing Company;  
distr. New York, Humanities Press, 1969. 175 p. (Studies in Logic and the  
Foundations of Mathematics).
750. Dictionary-outline of basic statistics.  
John E. Freund and F.J. Williams. New York, McGraw-Hill, 1966.
751. Funk and Wagnalls Dictionary of Data Processing Terms.  
Harold A. Rodgers. New York, Funk and Wagnalls, 1970. 151 p.
752. International Dictionary of Applied Mathematics.  
W.F. Freiber, ed. Princeton, Van Nostrand, 1960. 1173 p.
753. Mathematics dictionary. 4th ed.  
G. James and R.C. James. Princeton, N.J., London, etc., Van Nostrand  
Reinhold, 1976. vii, 509 p. £9.30.
754. New Mathematics dictionary and handbook.  
Robert W. Marks. New York, Grosset & Dunlap, 1964.
755. \*Standard Dictionary of Computer & Information Processing.  
Martin H. Weik. rev. 2nd ed. 1977. 17.95 (ISBN 0-8104-5099-2). Hayden.
756. Statistical dictionary of terms and symbols.  
A.K. Kurtz and H.A. Edgerton. New York, Wiley, 1939; London, Chapman  
& Hall, 1940. xiii, 191 p. (Reprinted Hafner. 1967. \$10.95).

MATHEMATICS, STATISTICS, COMPUTER SCIENCE (Cont'd)

DICTIONARIES (Cont'd)

757. The International dictionary of applied mathematics.  
W.F. Freiberger, ed. Princeton, N.J., New York, London, etc., Van  
Nostrand, 1960. viii, 1173 p. diagsr.
758. The Layman's Dictionary of Computer Terminology.  
Norman Sondak and Eileen Sondak. New York, Hawthorne, 1973. 203 p.
759. \*Thesaurus of Computing Terms. 8th ed.  
National Computing Centre, ed. 1977. pap. 60.00 (ISBN 0-85012-169-8).  
Intl. Pubns. Serv.

**MATHEMATICAL SCIENCES  
ABSTRACTS AND INDEXES**

## ABSTRACTS AND INDEXES

760. Computer Abstracts, 1957-.

Technical Information Company. Monthly. Formerly: Bibliographical Series (1957-58); Computer Bibliography (1959).

Arrangements: By subject. A classification scheme is provided in preliminary pages of each issue. Alphabetical by title under each subject.

Coverage: Computer theory, artificial intelligence, pattern recognition, mathematics techniques, programming, system design, data storage and transmission, digital, analogue and hybrid computers, etc. Proceedings, U.S. Government Reports, patents, conference papers and books included. Monthly and annual subject, author and patent indexes.

Scope: International.<sup>1,4</sup>

761. Computer and Control Abstracts. v. 1-.

London, Institution of Electrical Engineers; New York, Institute of Electrical and Electronics Engineers, 1966-. Monthly. (Science Abstracts Series C).

An international abstracting journal covering indicative and informative abstracts on systems and control theory, control and computer technology and applications, control technology, numerical analysis and theoretical computer topics, computer hardware; computer software, and systems and equipment. Over 24,000 items are abstracted each year. Abstracts are short, and the language of the original article is indicated. Monthly and annual indexes: author, bibliography, books, conferences, patents, and subject. The supplementary current awareness publication of the two institutes is Current Papers on Computers and Control (1966-; no. 1-; monthly) with approximately 2,000 references per issue, which are then abstracted and appear in Computer and Control Abstracts.<sup>1,4</sup>

762. Computer and Information Systems. v.1-.

Cambridge, Mass., Cambridge Communication Group, 1962-. 20 nos. per year in 2 v.

An international abstracting journal for material on computer software; computer applications; computer mathematics; and computer electronic. Covers periodicals, government reports, conference proceedings, books, dissertations and patents. Indexes: author and subject indexes per issue and annually.<sup>2,4</sup>

763. Computing journal abstracts.

Manchester, National Computing Centre, 1969-. v.1, no. 1-. Weekly. £35 pa. (£25.50, NCC members).

About 3,000 indicative abstracts pa. Sections: International computing trends - Privacy, security, auditing - Personnel selection, salaries - Education - Software, programming - Storage - Computer acquisition, leasing, bureaux - Microprocessors, microminiaturisation - Minicomputers - System/Preference - Word processing - Computer applications. 6 monthly index, arranged by computer literature classification scheme. Photocopy back-up service.<sup>4</sup>

## ABSTRACTS AND INDEXES

(Continued)

764. Computing Reviews. v. 1-.  
New York, Association for Computing Machinery, 1960-.
- Provides critical reviews and information abstracts of computer literature in classified arrangement, emphasizing machine aspects such as hardware and software; however, there are also sections on textbooks, proceedings, the mathematics of computation, functions, and applications to natural sciences and engineering. There are occasional features and multiple reviews and some authors' rebuttals. Lists of reprints available from ACM of their publications and of the original bibliographies on specific topics published at irregular intervals are included along with the reviews. Author index for each volume and cumulative permuted KWIC indexes. Special topical bibliographies, from time to time.<sup>2,4</sup>
765. Contents of Contemporary Mathematical Journals and New Publications.  
v. 1-., 1969-. Providence, R.I., American Mathematical Society, 1969-.  
biweekly.
- Combined current-awareness journal, table-of-contents reprint service, and selection tool for monographic works. New Publications began separately in 1961. International coverage, Authors' addresses provided in each issue.<sup>2</sup>
766. Current papers on computers & control.  
An INSPEC publication (London, IEE [and] IEEE, New York, 1966-. no. 1-.  
Monthly, 12 pa. (members of IEE, IEEE, etc., £6), is a current awareness alerting service, carrying about 2,000 references per issue and similarly arranged to Computer and control abstracts, which subsequently abstracts, classifies and indexes all the papers listed in Current papers. No indexes.<sup>4</sup>
767. Mathematical Reviews. v. 1-.  
Providence, R.I., American Mathematical Society, 1940-. 2 volumes per year in 12 numbers.
- This monthly abstracting service has international coverage of pure and applied mathematics, and aspects of physics. Most abstracts are in English, but French and German abstracts are also included. Each abstract is numbered consecutively and gives the author, title, periodical citation and/or publisher. Books and monographs have a star preceding the author's name and a price following the citation. Journal issues on a given topic may be reviewed as a whole and supplied with an ad hoc title. Titles of articles in French, German and English are given in their original language, while those in other languages are translated into English with an indication of the original language. The abstracts themselves are arranged by subject and are signed. Reprints from other science abstracting services are identified by abbreviations. There is an author index and a brief subject index to the categories, including symposia, proceedings, biographical collections, and bibliographies. Important to note is that this service uses its own method of transliterating Russian, which varies considerably from the Library of Congress method; for convenience, comparative transliteration tables from several sources are printed at the end of the issues. Index

## ABSTRACTS AND INDEXES

(Continued)

of mathematical papers has been the annual index to Mathematical reviews since 1973. Each index volume consists of author and subject indexes. V. 10 of the index covering 1978, and all future annual volumes will appear concurrently with the December issue of Mathematical reviews.<sup>2,4</sup>

768. Statistical Theory and Methods Abstracts. v. 1-., 1959-.  
Edinburgh, published for the International Statistical Institute by Oliver and Boyd, 1959-70; London, Longmans, 1971-. quarterly.

Formerly International Journal of Abstracts: Statistical Theory and Methods, 1954-63; merged in 1964. Classified arrangement of such topics as probability, distributions, variance analysis, experiment design, sampling, new tables, and stochastic theory and time series analysis. Author index. For previously published research on the last category, consult Herman Wold, Bibliography on Time Series and Stochastic Processes (Cambridge, Mass., MIT Press, 1965. 516 p.). The undergirding of the Abstracts is an impressive project formulated by two enterprising bibliographers who, with the assistance of colleagues, completed an admirable work of information control.<sup>2</sup>

769. Zentralblatt fur Mathematik und ihre Grenzgebiete.  
Mathematical abstracts. Berlin, etc., Springer-Verlag, 1931-. Irregular.

Preceded by Jahrbuch uber die Fortschritte der Mathematik (Berlin, de Gruyter, 1968-1942).

About 1,700 indicative and informative abstracts per issue. 94 sections, covering pure and applied mathematics, and physics, astrophysics and geophysics as well. Signed abstracts in English, French or German. Author and subject indexes per issue, cumulated (e.g., v. 360 consists of indexes to v. 351-9, 1976-78).<sup>2,4</sup>

## REFERENCES

1. Abstracts and Indexes in Science and Technology: A Descriptive Guide.  
Dolores B. Owen and Marguerite M. Hanchey. Metuchen, New Jersey: The Scarecrow Press, 1974.
2. Science and Engineering Literature.  
H. Robert Malinowsky, et al. Littleton, Colorado: Libraries Unlimited, 1976.
3. Scientific and Technical Information Science.  
Ching-Chih Chen. Cambridge, Massachusetts: MIT Press, 1977.
4. Walford's Guide to Reference Material. Volume I: Science and Technology.  
Fourth edition. Edited by A.J. Walford. London: The Library Association, 1980.

**URBAN PLANNING/DEVELOPMENT AND TRANSPORTATION  
REFERENCE BOOKS**

URBAN PLANNING/DEVELOPMENT AND TRANSPORTATION

BOOKS

770. \*Access, Travel, and Transportation in New Communities.  
Robert B. Zehner. (New Communities Research Ser.) 1977. professional  
ref. \$17.50. Ballinger Pub.
771. \*Advanced Urban Transportation.  
I. G. Black, et. al. 1975. Lexington Bks. \$19.00
772. Air Transportation. 3rd ed.  
Robert M. Kane. Dubuque, Iowa. Kendall/Hunt Pub. Co., 1971. 419 p.
773. Airport Terminals Reference Manual. 5th ed.  
International Air Transport Association. Montreal, Canada, 1970.  
76 p.
774. Airports and Their Environment.  
National Technical Information Service. Springfield, VA, 1972. 524 p.
775. \*An Introduction to Town Planning Techniques.  
Margaret Roberts. Merrimack Bk Serv. 1974. pap. \$6.95.
776. \*Architect & Community: Environmental Design in an Urban Society.  
Geoffrey Spyer. (Contemporary Issues Ser: No. 4). (Illus.). 1971.  
text ed. 12.00x. Humanities.
777. \*Bicycle Transit: Its Planning & Design.  
Bruce L. Balshone, et. al. Praeger, 1975. (Special Studies). Illus.  
text ed. \$17.95.
778. \*Central City Economic Development.  
Benjamin Chinitz, ed. Abt Assoc., 1979. text ed. \$19.50.
779. \*Central City Malls.  
Harvey M. Rubenstein. Wiley, 1978. \$22.50.
780. Chartering Practice.  
J. Bes. London, England: Barker and Howard Ltd., 1972. 351 p.
781. Chartering and Shipping Terms. 7th ed.  
New York, NY: Wm. Heinman, 1970. 411 p.
782. Cities and Urbanization.  
Richard T. Geruson. Praeger Publishers. New York. 1977.
783. Commercial Motor Transportation. 4th ed.  
Charles Albert Taff. Homewood, Ill., 1969. 496 p.
784. \*Concepts & Techniques in Urban Analysis.  
Bola Ayeni. St. Martin. 1979. \$25.00.
785. Current Advances in Ecological Sciences.  
Oxford, etc., Pergamon, 1975-, v.1-.
786. \*Economic Issues in Metropolitan Growth.  
Paul R. Portney, ed. Johns Hopkins. 1977. (Resources for the Future  
Ser). \$8.95x.

URBAN PLANNING/DEVELOPMENT AND TRANSPORTATION (Cont'd)

BOOKS (Cont'd)

787. \*Economic Theory & the Cities.  
J. V. Henderson. Academic Press, 1978. \$21.00
788. Economics of Sea Transport.  
Carleen O'Laughlin. Pergamon Press, Elmsford, NY, 1967. 228 p.
789. \*Economics of Urban Problems. 2nd ed.  
Arthur C. Schreiber, et. al. Houghton Mifflin, 1976. text ed.  
\$15.75. Illus.
790. Energy: Demand, Conservation, and Institutional Problems.  
Michael S. Macrakis, editor. Cambridge, MA: The MIT Press, 1974.  
556 p.
791. \*Environmental Management: Planning for Traffic.  
J. Antoniou. McGraw, 1972.
792. Fundamentals of Transportation.  
William L. Grossman. New York, NY: Simmons-Boardman Publishing  
Company, 1959. 280 p. (Out-of-Print).
793. Guide to Industrial Site Selection.  
Colin Barrett and M. J. Newbourne. Washington, DC: Traffic Service  
Corporation, 1972. 37 p.
794. Handling, Transportation and Storage of Fruits and Vegetables. Vol. 1.  
Wener J. Lipton and A. Lloyd Ryall. Westport, CT: Avi Publishing  
Company, 1972. 473 p.
795. Improving Railroad Productivity.  
Washington, DC: National Commission on Productivity, 1973. 329 p.
796. Intercity Freight Movement by Rail and Highway.  
Springfield, VA: National Technical Information Service, 1974. 50 p.
797. International Economics. 3rd ed.  
Peter Kenen and Raymond Lubitz. Englewood Cliffs, NJ: Prentice-Hall,  
Inc., 1971. 127 p.
798. International Trade.  
Jadish Bhagwati, editor. Baltimore, MD: Penguin Books, 1969. 414 p.
799. International Trade & Investment: Theory, Policy, Enterprise. 3rd ed.  
Franklin R. Root. Chicago, IL: South-Western Publishing Company,  
1973. 688 p.
800. International Trade--Tariff and Commercial Policies.  
Asher Isaacs. Homewood, IL: Richard D. Irwin, Inc., 1948. 864 p.  
(Out-of-Print).
801. International Trade: Theory and Empirical Evidence. 2nd ed.  
Robert H. Heller. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1973.  
240 p.

URBAN PLANNING/DEVELOPMENT AND TRANSPORTATION (Cont'd)

BOOKS (Cont'd)

802. \*Introduction to Urban Dynamics.  
Louis Alfeld and Alan K. Graham. MIT Press, 1976. \$24.50x.
803. \*Joint Report on the Expert Consultations on Policies & Institutions  
for Integrated Rural Development. Unipub., 1977. Vol. 2. pap.  
\$18.50.
804. Managing Human Resources. Vol. 13.  
Charles H. Levine, Ed. Sage Publications, Beverly Hills, 1977.
805. Merchant Ship Construction.  
H. J. Pursey. Glasgow, Scotland: Brown, Son & Ferguson, Ltd., 1969.  
242 p.
806. \*Metropolitan Transportation Planning.  
John W. Dickey. McGraw-Hill, 1975. text ed. \$22.95.
807. Mission: Port Development.  
Walter P. Hedden. Washington, DC: American Association of Port  
Authorities, 1967. 328 p.
808. Modern Dock Design. 4th ed.  
Milwaukee, WI;- Kelley Company, Inc., 1972. 19 p.
809. \*New-Town Planning: Principles & Practice.  
Gideon Golany. Wiley, 1976. \$29.50.
810. Ocean Transportation.  
Ernest G. Frankel and Henry S. Marcus. Cambridge, MA: The MIT Press,  
1974. 822 p.
811. Oil Pipeline Measurement & Storage Practices.  
Austin, TX: University of Texas, 1955. 134 p.
812. Oil Pipeline Pumping Station Operations.  
Austin, TX: University of Texas, 1956. 126 p.
813. \*Planning for Public Transport.  
Peter R. White. Merrimack Book Service, 1976. \$12.95.
814. \*Planning the Location of Schools: An Instrument of Educational Policy.  
Unipub, 1977. pap. \$18.25. illus.
815. Plant Location, Layout, and Maintenance.  
Ruddell Reed, Jr. Homewood, IL: Richard D. Irwin, Inc., 1967. 201 p.
816. \*Policy in Urban Planning: Structure Plans, Local Plans, & Urban  
Development. William Solesbury. Pergamon, 1974. \$14.00.
817. Port Design and Construction.  
Washington, DC: American Association of Port Authorities, 1964.  
175 p.

URBAN PLANNING/DEVELOPMENT AND TRANSPORTATION (Cont'd)

BOOKS (Cont'd)

818. Ports Maintenance.  
Washington, DC: American Association of Port Authorities, 1970.  
222 p.
819. \*Principles & Practice of Urban Planning. 4th ed.  
William I. Goodman and Eric C. Freund, eds. International City  
Management, 1968. \$20.00.
820. Principles of Inland Transportation. 4th ed.  
Stuart Daggett. New York, NY: Harper & Row, 1955. 788 p.
821. \*Public Expenditures in the Urban Economy.  
Charles Brecher and Kurt Katzmar. Universe, 1980. (Conservation  
of Human Resources ser.).
822. Road Research: Bus Lanes & Busway Systems.  
Organization for Economic Cooperation and Development, 1977. \$7.00.
823. Seaports and Seaport Terminals.  
James Bird. London, England: Hutchinson & Company, Ltd., 1971.  
230 p.
824. \*Sociology & Urban Planning.  
Lee Taylor. Good News, 1980. text ed.
825. \*Surveys for Town & Country Planning.  
John N. Jackson. Greenwood, 1976. \$14.00x.
826. \*Systematic Urban Planning.  
Darwin G. Stuart. Praeger, 1976. (Special Studies). text ed. \$24.50  
illus.
827. Systems of Cities.  
L. S. Bourne and J. W. Simmons, eds. New York, NY: Oxford University  
Press, Inc., 1978.
828. \*The Design of Residential Areas: Basic Considerations, Principles &  
Methods. Thomas Adams. Arno Press, 1974. (Metropolitan America  
Ser.: Vol. 6). Reprint of 1934 ed. \$25.00.
829. \*The Economics of Urban Transport.  
Kenneth Button. Lexington Books, 1977. \$18.50. illus.
830. The Elements of Shipping. 3rd ed.  
A. E. Branch. New York, NY: Halsted Press, 1975. 200 p.
831. \*The Politics & Economics of Urban Services.  
Robert L. Lineberry, ed. Sage, 1978. (Contemporary Social Science  
Issues: No. 43). pap. \$4.50.

URBAN PLANNING/DEVELOPMENT AND TRANSPORTATION (Cont'd)

BOOKS (Cont'd)

832. \*The Politics of Planning: City Planning.  
Francis Gladstone. International Pubns Serv., 1976. pap. \$7.50.
833. \*The Urban Pattern. City Planning and Design. 3rd ed.  
Arthur B. Gallion and Simon Eisner. D Van Nostrand, 1975. text ed.  
\$17.95.
834. The Urban Predicament.  
William Gorham and Nathan Glazer. The Urban Institute, Washington,  
D.C., 1976.
835. Tire Service Manual.  
New York, NY: Rubber Manufacturers Association, 1973. 32 p.
836. \*To Build a City: A History of Modern Concepts of City Planning.  
Charlene M. Leonard. Schenkman, 1979. text ed. \$12.50. pap. text  
ed. \$5.95. illus.
837. Traffic Science.  
C. Gazis, ed. Somerset, NJ: Wiley-Interscience, 1974. 304 p.
838. \*Transportation & Traffic Management, 4 vols. 16th ed.  
E. Albert Ovens. Traffic Service Corp., 1978. text ed. \$20.50.
839. \*Urban Transportation for the Environment.  
Richard Zerbe and Kevin Croke. Ballinger Publishing, 1975. (Studies  
in Environment & Urban Economy). text ed. \$16.50.
840. Truck Transportation.  
Washington, DC: The Operations Council, 1969. 247 p.
841. \*Urban & Regional Economics: Structure & Change.  
M. Jarvin Emerson and F. Charles Lamphear. Allyn, 1975. text ed.  
\$15.95.
842. \*Urban Development in the Third World: Policy Guidelines.  
John D. Herbert. Praeger, 1979. (Praeger Special Studies). \$19.95.
843. \*Urban Development: The Process & the Problems.  
Wallace F. Smith. University of California Press, 1979. (Campus:  
No. 238). pap. \$6.95.
844. \*Urban Economic & Planning Models: Assessing the Potential for Cities  
in Developing Countries. Rakesh Mohan. Johns Hopkins, 1978. (World  
Bank Staff Occasional Paper Ser: No. 25). pap. text ed. \$5.50.
845. \*Urban Economic Problems.  
Richard F. Muth. Harper-Row, 1975. text ed. \$17.95.
846. Urban Economics.  
Edwin S. Mills. Illinois: Scott, Foresman and Company, 1972.

URBAN PLANNING/DEVELOPMENT AND TRANSPORTATION (Cont'd)

BOOKS (Cont'd)

847. \*Urban Economics & Policy Analysis.  
Robert Bish and Hugh Nourse. McGraw-Hill, 1975. text ed. \$16.95.  
illus.
848. Urban Economics and Public Policy.  
James Heilbrun. St. Martin's Press, New York. 1974.
849. Urban Goods Movement.  
Washington, DC: Transportation Research Board, 1974. 113 p.
850. \*Urban Growth & Economics.  
Shafer. Reston, 1977. \$14.95.
851. \*Urban Growth Policy in a Market Economy.  
George S. Tolley, et. al. Academic Press, 1979. (Studies in Urban  
Economics Ser.) \$16.50.
852. \*Urban Land Economics: Principles & Policy.  
Graham Hallett. Shoe String Press, 1979. \$19.50. illus.
853. \*Urban Mobility in Developing Countries.  
P. G. Patankar. Verry, 1979. text ed. \$22.50.
854. \*Urban Nongrowth City Planning for People.  
Earl Finkler, et. al. Praeger, 1976. (Special Studies). text ed.  
\$18.95.
855. Urban Outcomes.  
Frank Levy. Los Angeles: University of California Press, 1974.
856. \*Urban Planning & Architecture.  
Sol A. Ward. Philos Library, 1971. \$5.95.
857. \*Urban Planning Problems.  
Gordon E. Cherry, ed. Barnes & Noble Books, 1974. text ed. \$16.00.  
illus.
858. \*Urban Transport Economics.  
D. A. Hensher. Cambridge University Press, 1977. pap. \$8.95.  
illus.
859. \*Urban Transport Studies in Economic Policy.  
M. E. Beesley. Butterworths, 1973. (Studies in Transport & Regional  
Economics). \$24.50.
860. \*Urban Transportation: An Answer.  
Norman L. Cooper. Indiana University, Bureau of Business Research,  
1971. (Institution for Urban Transportation Ser: No. 1). pap. \$2.50.
861. \*Urban Transportation Modeling & Planning.  
Peter R. Stopher. Lexington Books, 1975. \$22.95.

URBAN PLANNING/DEVELOPMENT AND TRANSPORTATION (Cont'd)

BOOKS (Cont'd)

862. \*Urban Transportation Planning: Current & Future Prospects.  
Peter Bonsall, et. al., eds. Universe, 1977. \$29.50.
863. \*Urban Transportation Problem.  
John R. Meyer, et. al. Harvard University Press, 1965. pap. \$4.95.
864. \*Urban Transportation Technology.  
Thomas J. McGean. Lexington Books, 1976. \$23.50.
865. \*A Systems View of Planning Towards a Theory of the Urban and Regional Planning Process. George Chadwick. (Urban and Regional Planning Series: Vol. 2). 1972. text ed. 18.00. pap. 12.00. Pergamon.
866. \*A Systems View of Planning.  
George Chadwick. 2nd ed. (Illus.). 1977. text ed. 16.70. pap. 10.00. Pergamon.
867. \*Access to Power: Politics & the Urban Poor in Developing Nations.  
Joan M. Nelson. (Center for International Affairs, Harvard University). 1979. 27.50. pap. 6.95. Princeton U. Pr.
868. \*Captive Cities: Studies in the Political Economy of Cities & Regions.  
Michael Harloe. 1977. 21.95. Pub. by Wiley-Interscience. Wiley.
869. \*City Class & Power.  
Manuel Castells. Lebas, Elizabeth, tr. from Fr. 1979. 18.95x. St. Martin.
870. \*Cities Unlimited: Urbanization in Australia & New Zealand.  
D.C. Thorns. (Studies i. Society). 1978. text ed. 21.50x. pap. text ed. 10.50x. Allen Unwin.
871. \*CLUG: Community Land Use Game.  
Allan Feldt. Orig. Title: Clug Players Manual. 1972 pap. text ed. 6.95. Free Pr.
872. \*Concepts & Techniques in Urban Analysis.  
Bola Aveni. 1979. 25.00. St. Martin.
873. \*Exploration in Urban Land Economists.  
John H. Sullivan, ed. 1970. pap. 2.50. Lincoln Inst. Land.
874. \*Faces of Change: Five Rural Societies in Transition: Bolivia, Kenya, Afghanistan, Taiwan, China Coast. Norman N. Miller & Manon L. Spitzer, eds. (Illus.). 1978. pap. text ed. 15.50. Am. Un. Field.
875. \*Focus: Urban Society 78-79.  
(Annual Editions Ser.). (Illus.). 1978. pap. text ed. 5.75. Dushkin Pub.
876. \*Instructional Planning Systems: A Gaming Approach to Urban Problems.  
John L. Taylor. (Illus.). 1971. 21.95. Cambridge U. Pr.

URBAN PLANNING/DEVELOPMENT AND TRANSPORTATION (Cont'd)

BOOKS (Cont'd)

877. \*Inter-Urban Systems & Regional Economic Development.  
W.B. Stohr. (CCG Resource Papers Ser.: No. 26). (Illus.). 1974.  
pap. text ed. 3.00. Assn. Am. Geographers.
878. \*Models, Evaluations & Information Systems for Planners. Vol. 1.  
J. Perraton & R. Baxter. (Land Use & Built Form Studies). 1978. text  
ed. 30.00x. Longman.
879. \*Models for the Analysis & Planning of Urban Systems.  
Allan W. Steiss. 1975. 19.95. Lexington, Bks.
880. \*Modern Metropolis: Its Origins, Growth, Characteristics, & Planning,  
Selected Essays. Hans Blumenfeld. P. Spreiregen, ed. 1967. pap.  
4.95. MIT Pr.
881. \*Neighborhood, City & Metropolis At Integrated Reader in Urban Sociology.  
Robert Gutman & David Popenoe, eds. pap. text ed. 16.95x. Random.
882. \*New Perspectives on the American Community: A Book of Readings.  
Roland L. Warren, ed. 3rd ed. (Orig.). pap. text ed. 9.95x. Rand.
883. \*Our Industrial Urban Civilization.  
Nels. Anderson. 1964. 6.00x. Asia.
884. \*Planning Theory in the Nineteen Eighties: A Search for Future Directions.  
Robert W. Burchell & George Sternlieb, eds. 1978. text ed. 15.00  
Ctr. Urban Pol. Res.
885. \*Progress in Planning: Recent Research in Urban & Regional Planning.  
D.R. Diamond & J.B. McLoughlin, eds. 3 pts. 1979. Pergamon.
886. \*Principles of Rural-Urban Sociology.  
R.A. Sorokin & C.C. Zimmerman. Repr. of 1929 ed. 30.00. Kraus Repr.
887. \*Residential Patterns in American Cities: 1960.  
Philip H. Rees. (Research Papers Ser.). (Illus.). 1979 pap. 8.00.  
U. Chicago Dept. Geog.
888. \*Rural Development & the Changing Countries of the World.  
P. Manniche & J.F. Potter, eds. Bks. 1 & 2. 1970. 22.00. Pergamon.
889. \*Social & Economic Information for Urban Planning.  
Doris B. Holleb. (Midway Reprint Ser.). 1973. Vol. 1. pap. 4.50x. Vol.  
2. pap. 5.50x. U. of Chicago Pr.
890. \*Sociology & Urban Planning.  
Lee Taylor. 1980 text ed. price not set. Good News.
891. \*Statistics & Urban Planning.  
Kenneth Williams. 1975. 21.50. Halsted Pr.
892. \*Systemic Planning Theory & Application.  
Anthony J. Catanese & Alan W. Steiss. (Illus.). 1970. 28.50x. Irvington.

URBAN PLANNING/DEVELOPMENT AND TRANSPORTATION (Cont'd)

BOOKS (Cont'd)

- 893.\*Systematic Urban Planning.  
Darwin G. Stuart. (Special Studies). (Illus.). 1976. text ed. 24.50  
Praeger.
- 894.\*The Cities in Tomorrow's World: Challenges to Urban Survival.  
David R. Michelsohn & Science Book Associates Editors. (Tomorrow's World  
Ser.). (Illus.). (gr. 7 up). 1973. PLB 5.79. Messner.
- 895.\*The Economics of City Planning: A Case Study of Indianapolis.  
Philip A. Shade. (Business Report Ser: No. 44). 1970. pap. 4.75. Ind.  
U. Busn. Res.
- 896.\*The Urban Community.  
Ernest W. Burgess, ed. 1972. Repr. of 1926 ed. 12.50. AMS Pr.
- 897.\*The Urban Ecosystem: A Holistic Approach.  
F. Stearns & T. Montag, eds. (Community Development Ser.: Vol. 14).  
1975. DH&R.
- 898.\*The Urban Environmental System: Modeling for Research, Policy-Making &  
Education. Peter House. 1973. 17.50x. Sage.
- 899.\*The Urban Experience.  
Claude S. Fischer. (Orig.). 1976. pap. text ed. 7.50. HarBracel.
- 900.\*Urban & Regional Models in Geography & Planning.  
A.G. Wilson. 35.50. pap. 15.95. Pub. by Wiley-Interscience. Wiley.
- 901.\*Urban Anthropology: The Cross-Cultural Study of Complex Societies.  
Richard Basham. 1978. text ed. 12.95. Mayfield Pub.
- 902.\*Urban Blight & Slums: Economic & Legal Factors in Their Origin, Reclamation  
& Prevention. Mabel L. Walker. (Illus.). 1971. Repr. of 1938 ed.  
20.00. Russell.
- 903.\*Urban Life: The Sociology of Cities & Urban Society.  
Albert N. Cousins & Hans Nagpaul. 1979. text ed. 15.95x. Wiley.
- 904.\*Urban Modelling.  
M. Batty. (Cambridge Urban & Architectural Studies). (Illus.). 1976.  
50.00. Cambridge U. Pr.
- 905.\*Urban Mosaic: Towards a Theory of Residential Differentiation.  
Duncan Timms. (Geographical Studies: No. 2). (Illus.). 1971. 27.50x  
pap. 8.95x. Cambridge U. Pr.
- 906.\*Urban Policy-Making: Influences on County Boroughs in England & Wales.  
Noel T. Boaden. 1971. 15.00. Cambridge U. Pr.
- 907.\*Urban Reader.  
Susan Cahill & Michele Cooper. (Illus.). 1971. pap. text ed. 7.95.  
P-H.
- 908.\*Urban Residential Location Models.  
Stephen H. Putman. (Studies in Applied Regional Science: Vol. 13). 1979.  
lib. bdg. 19.95. Martinus Nijhoff Pubs. Kluwer Boston.

URBAN PLANNING/DEVELOPMENT AND TRANSPORTATION (Cont'd)

BOOKS (Cont'd)

909. \*Urban Sociology.  
Robert A. Wilson & David A. Schulz. (P-H Ser. in Sociology). (Illus.).  
1978. ref. ed. 15.95. P-H.
910. \*Urban Sociology in an Urbanized Society.  
J.R. Mellor. (International Library of Sociology). 1977. 20.00.  
Routledge & Kegan.
911. \*Urban Systems Dynamics.  
Alan W. Steiss. (Illus.). 1974. 18.50. Lexington Bks.
912. \*Urban Villagers.  
Herbert J. Gans. 1962. 9.95. pap. text ed. 4.95. Free Pr.

DICTIONARIES

913. Dictionary of the Environmental Sciences.  
Robert W. Durrenberger, comp. Palo Alto, California: National Press  
Books, 1973. 282 p. illus.
914. Pipeline Dictionary.  
Alois P. Altmeyer and Herbert Bucksch. New York, NY: Adler's Foreign  
Books, Inc., 1971. 288 p.

ENCYCLOPEDIAS

915. \*Encyclopedia of Urban Planning.  
Arnold Whittick. McGraw-Hill, 1974. \$46.50.
916. Family health encyclopedia.  
Philadelphia, Lippincott, 1970. 2v.
917. Grzimek's Encyclopedia of ecology.  
B. Grzimek. English ed. New York, London, etc., Van Nostrand Reinhold,  
1976. 705 p. illus., maps. £32.
918. McGraw-Hill Encyclopedia of Environmental Science.  
New York: McGraw-Hill, 1974. 754 p. illus. charts. graphs. index.
919. The New York Times Encyclopedic Dictionary of the Environment.  
Paul Sarnoff. New York: Quadrangle Books, 1971. 352 p. illus.

HANDBOOKS

920. \*A Practical Manual in Urban Design.  
Andrew Mackie. Pergamon, date not set.

URBAN PLANNING/DEVELOPMENT AND TRANSPORTATION (Cont'd)

HANDBOOKS (Cont'd)

921. Community Builders Handbook.  
J. Ross McKeever, Ed. Washington, DC: Urban Land Institute, 1968.  
526. p.
922. Design Manual, Airfield Pavements.  
Washington, DC: U.S. Government Printing Office, 1973. 147 p.
923. Design Manual, Dry-Docking Facilities.  
Washington, DC: U.S. Government Printing Office, 1974. 308 p.
924. Foreign Trade Accounting and Management Handbook.  
Jack Goldner. New York, NY: Commerce Clearing House, 1972. 544 p.
925. Handbook of Environmental Control.  
Richard G. Bond and Conrad P. Straub, eds. Cleveland, CRC Press,  
1972-1973. 4v.
926. \*Input Output Methods in Urban & Regional Planning: A Practical Guide.  
W. I. Morrison and P. Smith. Pergamon, 1977. pap. \$10.00.
927. Manual on Uniform Control Devices for Streets and Highways.  
Washington, D.C.: U. S. Government Printing Office, 1971. 377 p.
928. Oil and Gas Pipelining Handbook.  
Dallas, TX: Energy Communications, Inc., 1970. 288 p.
929. The Neighborhood Organizer's Handbook.  
Rachelle Warren & Donald I. Warren. 1977. text ed. 9.95x. pap. 4.95x  
U. of Notre Dame Pr.

URBAN PLANNING/DEVELOPMENT AND TRANSPORTATION  
ABSTRACTS AND INDEXES

ABSTRACTS AND INDEXES

930. Current contents: behavioral, social and management sciences. v. 1- , 1969 -. Philadelphia: Institute for Scientific Information. Weekly.

This valuable service lists more than 700 journals, foreign and domestic, compiled with the aid of specialists, and reports their tables of contents in original format with minimum delay, sometimes before the journals are published.<sup>1</sup>

931. High-speed ground transportation and urban rapid transit systems bibliography service. Brockenhurst Hants., Robert Trillo, Ltd., July/August 1973-. v.1, no. 1-. 6 pa. 9 pa.

1977: 327 references, under authors, A-Z. Covers periodical articles, reports, papers. A current awareness service, with annual author and subject indexes.<sup>3</sup>

932. Library bulletin: abstracts of current literature on social and environmental planning, roads, traffic and transport, countryside and recreation, housing and local government, water supply and waste disposal, pollution and conservation. London, Departments of the Environment and Transport, 1972-. Fortnightly. 24.90 pa.

Between one-third and one-quarter of the abstracts (c.70 per issue) concern transport. Sections: Bridges and tunnels - Driving and driver education - Ports, docks and harbors - Railways - Road and vehicle safety - Road vehicles - Roads and road construction - Traffic engineering and control. Subject index.<sup>3</sup>

933. Planning and transportation abstracts. London, Greater London Council, Department of Planning and Transportation, Research Library, 1970-74. Monthly.

About 1,200 indicative and informative abstracts pa from c. 50 mainly British journals.

Designed primarily for the staff of the GLC Department of Planning and Transportation. Covers urban planning, transportation and other aspects of environmental engineering. Arranged by subjects A-Z (Bridges - Canals - Goods movement - Highway engineering - Parking - Road safety... Transport planning - Tunnels - Vandalism). Cross-references. Subject index. Annual author and subject indexes.

Now part of Urban abstracts (Greater London Council 1974-. no. 1-. 18 pa).<sup>3</sup>

934. Public Affairs Information Service. New York: Public Affairs Information Service, 1915--Weekly.

## ABSTRACTS AND INDEXES

(Continued)

A subject index to books, articles, pamphlets, documents and multigraphed material in the fields of political science, government, legislation, economics and sociology. Approximately 1000 journals are selectively indexed. Emphasis is on factual and statistical material. A useful source for the economics of transportation.<sup>2</sup>

935. Referativnyi zhurnal. Avtomobil'nyi i gorodskoi transport.  
Akademiya Nauk SSSR, Institut Nauchnoi Informatsii. Moscow, VINITI,  
1962-. Monthly.

About 10,000 indicative and informative abstracts on motor-vehicle and urban transport. 3 main sections, with sub-divisions: Motor vehicle construction - Motor-vehicle transport - Urban transport (including tramways, underground railways, buses and coaches). Annual author and subject indexes.<sup>3</sup>

936. Referativnyi zhurnal. Vodnyi transport.  
Akademiya Nauk SSSR, Institut Nauchnoi Informatsii. Moscow, VINITI, 1962-.  
Monthly.

About 10,000 indicative abstracts on water transport. 3 main sections: Shipbuilding - Ocean shipping, waterways and ports - Technical operations; repairing of vessels. Included diagrams, maps and plans. Annual author and subject indexes.<sup>3</sup>

937. SAGE Urban Studies Abstracts.  
Beverly Hills, California; Sage Publications, 1973--. 3/year.<sup>1</sup>

938. Social sciences citation index. v. 1-, 1973-.  
Philadelphia: Institute for Scientific Information. 3/yr., with annual  
cumulation.<sup>1</sup>

The launching of the SSCI is a major advance in current control over the literature. Plans call for indexing articles in ca. 1,000 ranking journals of different nations in anthropology, archaeology, area studies, community health, demography, economics, educational research, ethnic studies, geography, history, law, linguistics, management, political science, psychology, psychiatry, sociology, statistics, urban planning and development. Based on the indexing procedure which the institute pioneered in developing Science citation index (A218). The feasibility of including monographs as well as articles is to be considered.<sup>1</sup>

939. Sociological Abstracts, 1963 - present, 99,600 citations.  
Sociological Abstracts, Inc., San Diego, CA.

Sociological Abstracts covers the world's literature in sociology and related disciplines in the social and behavioral sciences. Over 1200 journals and other serial publications are scanned each year to provide coverage of original research, reviews, discussions, monographic publications theory, conference reports, panel discussions and case studies. The following fields are covered: Methodology and Research Technology, History and Theory of Sociology, Social Psychology and Group Interaction, Culture and Social Structure, Management and Complex Organization, Social Change and Economic Development, Mass Phenomena and Political Interactions, Social Differentia-

ABSTRACTS AND INDEXES

(Continued)

tion, Rural and Urban Sociology, Sociology of the Arts, Education, Religion, Science, Health and Knowledge, Demography and Human Biology, The Family and Social Welfare, Community Development, Policy, Planning, Forecasting and Speculation, Radical Sociology, Studies in Violence and Poverty and Feminism, Environmental Interaction.<sup>1</sup>

940. Transportation research abstracts.

Washington, Transportation Research Board, National Research Council, National Academy of Sciences, 1931-75, v. 1-45. Monthly. \$8 pa.

Ceased with December 1975 issue; now merged with Transportation research news (6 pa. \$12 pa). Formerly Highway research abstracts. About 750 indicative and informative abstracts pa. Sections: Design and construction - Planning and administration - Public transportation - Environmental quality and conservation - Operation and maintenance.<sup>3</sup>

941. Urban Affairs Abstracts.

Washington, D.C.: National League of Cities/U.S. Conferences of Mayors, 1971--. Weekly.<sup>1</sup>

## REFERENCES

1. Source of Information in the Social Sciences. 2nd ed.  
Carl Milton White, editor, Chicago, Illinois: American Library Association, 1973.
2. Transportation Information Sources.  
(Management Information Guide #8). Kenneth N. Metcalf. Detroit, Michigan:  
Gale Research Company, 1965.
3. Walford's Guide to Reference Material. Volume I: Science and Technology.  
Fourth edition. Edited by A.J. Walford. London: The Library Association, 1980.

**GENERAL AND MISCELLANEOUS  
ABSTRACTS AND INDEXES**

(This section contains General Science abstracts and indexes which provide coverage of multidisciplinary Journals. The miscellaneous publications in this section are ones which should have been included in either the engineering or agricultural core lists.)

GENERAL  
ABSTRACTS AND INDEXES

942. Applied Science and Technology Index.  
New York, Wilson, 1913-. monthly (except August) with quarterly and annual citations.

From 1913 to 1957 known as Industrial Arts Index.

A subject index to circa 225 English language periodicals covering both the theoretical sciences and their engineering applications. Its title is misleading in that the word "Applied" suggests, quite inaccurately, an exclusive concern with the applications of science - e.g., engineering. It does include pure physics, chemistry and geology, mathematics, metallurgy and computer science insofar as these subjects are represented by some of the major scientific periodicals in their fields. Also it provides substantial coverage of science applications, that is, the various subfields of engineering. It is therefore a general science and technology periodical index which is highly suitable for public libraries and for beginning searches by college students.<sup>3</sup>

943. Bulletin Signaletique. v. 1-.  
Paris, Centre National de la Recherche Scientifique, 1948-. monthly; some sections are quarterly. Title varies: formerly called Bulletin Analytique.

An excellent abstracting service covering all fields of science and technology. It is divided into 50 separate sections, each of which covers a specific subject and is available separately. All titles of articles other than French are translated into French with a notation of the original language title. Each entry gives a complete citation and descriptive abstract. There are author indexes to each issue. Although the periodicals abstracted overlap those of other abstracts-indexes, the Bulletin is in some cases more current.<sup>3</sup>

944. Comprehensive dissertation index, 1861-1972.  
Ann Arbor, Mich, Xerox Univ. Microfilms, 1973. 37 v. Annual supplements, ea. 5 v. 1973-. (1974-.).

v. 1-16 concern science and technology.

v. 1-4: Chemistry.

v. 5: Mathematics and statistics.

v.6-7: Astronomy and physics.

v.8-10: Engineering

v.11-13: Biological sciences.

v.14: Health and environmental sciences.

v.15: Agriculture.

v.16: Geography and geology.

v.11: Biological sciences, Biology and zoology (1973. xix, 1210 p.) has preliminaries, "Sources consulted", "How to obtain dissertation copies". Biology, p. 1-218; Zoology, p. 219-1210 - under subjects A-Z. About 80,000 entries. Subject index. Author index to v. 1-32, v. 33-37.<sup>5</sup>

ABSTRACTS AND INDEXES

(Continued)

945. Current Contents.  
Philadelphia, Institute for Scientific Information, 1961-. Weekly.

Not an index in the precise sense but a listing of the contents of the current issue of each of many leading journals in the sciences. Available in six sections: physical and chemical sciences; engineering, technology and applied sciences; behavioral, social and behavioral sciences; life sciences; agricultural, biology, and environmental sciences, and clinical practice.<sup>2,5</sup>

946. Dissertations abstracts international. B: The sciences and engineering.  
Abstracts of dissertations available on microfilm or as xerographic reproductions. Ann Arbor, Mich., University Microfilms, 1969-. Monthly. \$205 (U.S. & Canada); \$325 (foreign).

Previously as Microfilm abstracts (v. 1-11, 1938-51), then Dissertation abstracts (v. 12-29, 1952-69) (See Guide, v. 3, p. 110-1). As from 1966 Dissertation abstracts appeared in two sections, A. The humanities; B. The sciences and engineering. The new title, Dissertation abstracts international, reflects inclusion of dissertations from foreign universities.

About 15,000 informative abstracts pa in subject groups, A-Z (Aerospace studies... Zoology). Keyword title and author indexes per issue.<sup>5</sup>

947. Government Reports Announcements and Index.  
Springfield, VA: U.S. National Technical Information Service, 1938-. Semimonthly.

Formerly U.S. Government Research and Development Reports Index. Announcements and Index sections combined into one publication in 1975. Abstracts of scientific and technical-report literature emanating from over 225 government organizations. Over 50,000 abstracts are produced annually. Entries arranged under 22 major subject categories, with numerous subdivisions. Index section includes subject, personal and corporate-author, contract-number, and accession/report indexes.<sup>4</sup>

948. Index to Scientific Reviews, 1977-date.  
Philadelphia, Institute for Scientific Information.

An international interdisciplinary index to the review literature of science, medicine, agriculture, technology, and the behavioral sciences. Types of sources included are books, periodical articles, theses, and reports which have 70 or more references cited in their bibliography. The parts of the index are Source (author and organizational index), Permuterm (subject index), and Citation (which leads the searcher to all articles that have been cited in any of the types of sources covered).<sup>2</sup>

## ABSTRACTS AND INDEXES

(Continued)

949. Information Science Abstracts.  
Philadelphia: Documentation Abstracts, 1966-. Bimonthly.
- Continues Documentation Abstracts. Covers "information" in the broad sense, including its generation, publication, collection, documentation, etc. Classified arrangement with author and annual subject indexes.<sup>4</sup>
950. Pandex Current Index to Scientific and Technical Literature.  
New York, Pandex, Inc. (to 1969) and CCM Information Services, Inc., 1967-. biweekly; quarterly and annual cumulations. Available on microfilm or microfiche.
- Indexes scientific periodicals (about 2,000), technical reports and books. A broad-ranging multi-disciplinary scientific index covering science, medicine, technology. Covers over 2,000 significant journals fully, listing all professional articles and letters in each issue. Includes patents, technical reports, and over 6,000 books. Coverage continues to enlarge. Each issue is about 200 pages in length and contains two sections: subjects; and authors and permuted titles. Its computer production permits subject indexing of each article under one, two, or more of the 6,000-plus subject descriptors routinely used in each issue.
- Scope: International.<sup>1,5</sup>
951. Science Abstracts. Vols. 1-.  
London: Institution of Electrical Engineers, 1898-.
- Originally issued in 2 sections: series A, Physics Abstracts; and series B, Electrical and Electronics Abstracts. Since 1966, series C, Computer and Control Abstracts, has been added.
- The 3 abstract journals contain journal, patent, report book, and conference information. Subject and author indexes. All abstracts are now part of the INSPEC (Information Service in Physics, Electronical, and Control) system. For more information on each abstracts, see under separate entry.<sup>4</sup>
952. Science Citation Index. v. 1-.  
Philadelphia, Institute for Scientific Information, 1961-. quarterly with annual cumulations.
- A unique, computer-produced index that lists the reference or "cited" author with his work, followed by a list of source or "citing" authors, who have referred to the cited author and his work, with the paper in which the work was cited. Includes physical and biological sciences, medicine and engineering. Each issue of the publication being indexed is covered completely. All authors and their works cited in footnotes and bibliographies are listed as a cited author followed by the author and title of the article in which the footnote or bibliography appeared. About 85 percent of the citations are from periodicals. The remainder are from patents, government reports, books, meetings, dissertations, contracts, circulars, and personal communications. The index is international in scope and covers all subjects. It is issued

## ABSTRACTS AND INDEXES

(Continued)

quarterly, with the last issue being an annual cumulation. Published with the index is the Source Index with titles. This is an alphabetical listing of all source items (citing authors) complete with co-authors, full title of article, publication, volume, pages, year, type of source item (review, letter, correction), number of references in the bibliography of that source, the issue number, part and/or supplement number, and the ISI accession number for that periodical issue. Additional indexes include the patent citation index, corporate index, and the Permuterm subject index.

The purpose of a citation index is to provide systematic access to those books, papers, articles and technical reports which are being cited in currently published papers. Such an approach identifies the leading documents - those that are molding, shaping, and directing ongoing research programs.

SCI is not recommended as a substitute for conventional indexes, for in fact it forges a new dimension of bibliographic control. Science libraries that support advanced research, however, cannot afford to be without it.<sup>3,5</sup>

MISCELLANEOUS  
ABSTRACTS AND INDEXES

Abstracts on Health Effects of Environmental Pollutants. v. 1-.  
Philadelphia, Biosciences Information Service, 1972-. monthly.

This publication results from the scanning of two data bases: BIOSIS of Biosciences Information Service, and MEDLARS of the National Library of Medicine. It covers about 1,000 articles each month on occupational health and industrial medicine, chemicals or substances in the environment (with emphasis on their effects on human health), general reviews and original papers reporting potentially harmful effects of pollutants on humans, studies of lower vertebrates used as indicators of the substances toxic to man and vertebrates, invertebrates as vectors in the food chain, and reports of analytical methods for examining biological tissues or fluids.<sup>3</sup>

Agricultural engineering abstracts.  
Farnham Royal, Commonwealth Agricultural Bureaux, 1976-. v.1, no. 1-.  
Monthly. £35 pa.

Preceded by Agricultural and horticultural engineering abstracts (Silsoe, Beds., National Institute of Agricultural Engineering), 1950-66. About 3,000 abstracts pap. Sections: General - Mechanical power - Land improvement - Crop production - Protected cultivation - Crop harvesting and threshing - Handling and transport - Crop processing and storage - Live-stock buildings and equipment. Reports and conferences. Author index per issue. Annual author and subject indexes.

American Society for Engineering Education. Engineering School Libraries Division. Guide to literature on agricultural engineering; compiled by Elizabeth P. Roberts (Washington, The Society, 1971. [iii], 19 p.) lists c.300 items, with occasional brief annotations, in 12 sections. Includes information and research centres.<sup>5</sup>

Air Pollution Abstracts. v. 1-.  
Research Triangle Park, N.C., Air Pollution Technical Information Center, 1970-. monthly. Subscriptions from the U.S. Government Printing Office.

The subject scope of this service comprises emission sources, methods for measuring and controlling emissions, air quality, atmospheric interactions, effects of air-borne pollutants on plants, materials, animals and men, air pollution legislation and standards and the effects thereof on industry and the economy. The publication forms abstracted include all the primary forms discussed in Chapter 2. This service clearly overlaps with Environment Index and Pollution Abstracts, but its concentration on a single phase of environmental concerns enables it to provide the only comprehensive coverage of its topic. Arrangement is by the subject categories indicated above. The author and subject indexes in each issue are cumulated at intervals.<sup>3</sup>

## ABSTRACTS AND INDEXES

(Continued)

Automobile abstracts.

Nuneaton, Warwickshire, Motor Industry Research Association, 1968-.  
Monthly. £40 pa.

As MIRA abstracts, 1972-74. Originally Monthly summary of automobile engineering literature, 1955067.

About 1,200 indicative and informative abstracts pa. Abstracts are preceded by literature surveys (eg, October 1977: "Design, construction and operation of public service vehicles". 18 references). "Abstracts from the literature": Motor vehicles (production and operation: design and performance) - Vehicle components (body work; chassis components; power units) - Transmission systems and components - Materials for vehicle operation - Materials for vehicle construction - Research and development principles and organisation. Some abstracts run to 1p. Monthly author, annual author and subject indexes.<sup>5</sup>

Cotton and tropical fibres abstracts.

Farnham Royal, Commonwealth Agricultural Bureaux, 1976-. v. 1, no. 1-.  
Monthly. £20 pa.

V. 2 (1977): 1,520 abstracts. Sections: Cotton - Sisal - Jute - Sunnhemp - Kenaf and reselle - Other fibres and fibres in general. Reports. Monthly author and subject indexes.<sup>5</sup>

Desalination abstracts.

Tel Aviv, National Center of Scientific and Technical Technological Information, 1966-. v.1, no. 1-.

About 1,000 abstracts pa for books, reports, journals, patent, specifications and conference proceedings. 13 sections on scientific, technical and economic aspects of water desalination. UDC arrangement, Subject, name (personal and corporate) and patent number indexes.

Water desalting abstracts (Athens, Delyannis, 1970-. v. 1, no. 1-.  
Monthly. \$40 pa) has c.100 indicative and informative abstracts per issue in 6 sections. Evaporation, ionic and crystallization processes are dealt with, among others. Annual author and subject indexes.<sup>5</sup>

Environment abstracts.

New York, Environment Information Center, 1971-. v.1-. Monthly. \$225 pa.

V. 1-3 as Environment information access (6 pa) A wide-ranging US-slanted indexing and abstracting service, covering non-print, patent and government material. Subject, industry and author indexes, these being cumulated annually in The environment index, whose subject index has (v. 7. 1977). c. 25,000 entries.<sup>5</sup>

## ABSTRACTS AND INDEXES

(Continued)

- Environment Index, v. 1, 1971-date.  
New York: Environment Information Center.

Indexes periodicals, conferences, legislation, patents, books, government publications, films, and research reports. Subject, author, geography, federal register number, and standard industrial classification indexes. Subjects covered are air and water pollution, chemical and biological contamination, energy, food and drugs, land use and misuse, noise pollution, oceans and estuaries, population planning, radiological contamination, renewable resources, solid wastes, transportation, geophysical change, wildlife, and weather modification.<sup>2</sup>

- Irrigation and drainage abstracts.  
Farnham Royal, Commonwealth Agricultural Bureaux, 1975-. v.1.  
no. 1-. Quarterly. \$45 pa.

About 1,900 abstracts pa. Sections: Documentation - Water treatment - Irrigation (sub-divided by crop) - Drainage - Soil water relations - Plant water relations - Salinity and toxicity problems - Meteorological aspects - Earth and public aspects. Author index.<sup>5</sup>

- Irrigation and power abstracts: a bi-monthly digest of research development and technology in irrigation and power and engineering.  
New Delhi, Central Board of Irrigation and Power, 1943-.

Formerly Abstracts of current technical literature. About 2,000 indicative and informative abstracts in UDC order. No. indexes.

Noted: International Commission on Irrigation and Drainage. Bibliography on irrigation, drainage, river draining and flood control (New Delhi, the Commission, 1958 -. no. 1-. Annual).<sup>5</sup>

- "Marine engineering/shipbuilding/abstracts". In The Institute of Marine Engineers. Transactions. London, the Institute, 1938-70. diags. Monthly.

1971:869 informative abstracts (each c.250 words). In no discernible order, but a subject index precedes entries in each monthly issue. Subjects range from anchors, containerships, fishing, gas turbines, lubrication and safety measures to new ship construction, welding, cutting and brazing. Few British patent specifications are included.

As from 1971 the abstracts appear in most issues of Marine engineers review; nearly 100 abstracts and patent specifications per issue.

The weekly Maritime studies current awareness bulletin (Plymouth, Devon, learning Resources Centre, Plymouth Polytechnic, 1973-. no. 1-) carries c.70 references per issue to articles. (Fishing - Marine architecture/ Shipbuilding - Navigation/Hydrology/Astronomy - Offshore - Ports/Harbours/ Waterways - Safety/Pollution/Shipping Operations).<sup>5</sup>

## ABSTRACTS AND INDEXES

(Continued)

Nutrition abstracts and reviews. Series B: Livestock feeds and feeding.  
Commonwealth Bureau of Nutrition, Rowett Research Institute, Bucksburn,  
Aberdeen. Farnham Royal, Commonwealth Agricultural Bureaux, 1930-. v. 1-.  
Monthly. \$135 pa.

1977: 6,170 abstracts. Sections: Technique - Technology - Feedingstuff  
and feeds - Physiology and biochemistry - Feeding of animals - Diet in  
etiology of disease. Book reviews and reports. Monthly and annual author  
and subject indexes.<sup>5</sup>

Population Sciences, Index of Biomedical Research, v.1, 1973-date.  
DOCUMENTS (National Institute of Child Health and Human Development)

Provides resources to articles concerned with the biomedical research  
literature in the population sciences. Contents include anatomy and  
physiology-human, anatomy and physiology-animal, drug and radiation effects,  
microbiology, sterility, immunology, reproductive behavior, contraceptive  
drugs, contraceptive devices, medical and surgical procedures, steriods  
and specified non-steriods. Author and review indexes.<sup>2</sup>

Poultry abstracts.

Farnham Royal, Commonwealth Agricultural Bureaux, 1975-. v.1, no. 1-.  
Monthly. 20 pa.

1977: 3,066 abstracts. Sections: Fowl - Turkey - Duck - Goose - Game  
and other birds - General (eg, Poultry products; Parasitic disorders. Book  
reviews and reports. Author index. Annual author and subject indexes.<sup>5</sup>

Rice sbtracts.

Slough, Bucks., Commonwealth Agricultural Bureau, 1978-. v.1, no. 1-.  
Monthly. \$72 pa.

About 2,000 abstracts pa. Sections: Breeding and selection - Varieties and  
varietal resistance - Agronomy - Fertilizers - Weeds - Pests... Nutrition  
and utilisation - Economics, rural development and land use - Techniques.  
Reports. Meetings. Books. Monthly author index.

Noted: Food and Agriculture Organisation. Rice terminology/Terminologie du  
riz/Terminologia del arroz (Rome, FAO., 1974. 82 p. (Terminology bulletin  
26).<sup>5</sup>

Selected water resources abstracts.

Washington, Department of the Interior, Water Resources Scientific Infor-  
mation, Center, Office of Water Resources Research, 1968-. v.1-. Semi-  
monthly.

About 450 abstracts per issue. Subject fields: 01. Nature and water - 02.  
Water cycle - 03. Water supply, augmentation and convservation - 04. Water  
quantity management and control - 05. Water quality management and protection  
- 06. Water resources planning - 07. Resources data - 08. Engineering works  
- 09. Manpower, grants and facilities - 10. Scientific and technical infor-  
mation. Computerised subject, author, organisational and accession number  
indexes. Abstract sources.<sup>5</sup>

ABSTRACTS AND INDEXES

(Continued)

Ship abstracts: information service on ship technology, ship operation and ocean engineering. Oslo, Ship Research Institute of Norway, 1973-.

Joint venture by the Scandinavian Ship Research Institute and Netherlands Maritime Institute. 1977: 2,908 abstracts, drawn from c.350 periodicals, report series and technical papers, worldwide. Classes 01-40 (01. Management - 02. Shipbuilding industry - 03. Shipping (General)... 12. Manoeuvrability. Course stability... 16. Shipyards - 17. Mechanical engineering... 19. Machinery plant (general)... 28. Cargo handling... 32. Corrosion. Surface treatment... 35. Marine safety... 38. Fishing technology - 39. Winter shipping - 40. Miscellaneous. Subject and author entries.<sup>5</sup>

Sorghum and millet abstracts.

Farnham Royal, Commonwealth Agricultural Bureaux, 1976-. v.1, no 1-. Monthly. \$36 pa.

About 1,000 indicative and informative abstracts pa. 6 sections. Reports. Monthly author and subject indexes.<sup>5</sup>

Soyabean abstracts.

Farnham Royal, Commonwealth Agricultural Bureaux, 1978-. v.1, no. 1-. Monthly. \$55 pa.

About 1,500 abstracts pa, in 15 sections (Breeding and selection - Varieties and varietal resistance - Agronomy... Growth, physiology and biochemistry... Nutrition and utilisation... Miscellaneous. Reports. Meetings. Books. Monthly author index.

Noted: Harper, A. Soybean processing and utilisation: a partially annotated bibliography (Jakarta, Lembaga Ilmu Pengetahuan Indonesia, 1973. 57 p.).<sup>5</sup>

## REFERENCES

1. Abstracts and Indexes in Science and Technology: A Descriptive Guide.  
Dolores B. Owen and Marguerite M. Hanchey. Metuchen, New Jersey: The Scarecrow Press, 1974.
2. Life Sciences and Allied Fields: Indexes and Abstracts, Book Review Indexes, Serials Bibliographies, Translations.  
D. Corinne Colpitts. Arkansas: Arkansas University, Mullens Library, 1978.
3. Science and Engineering Literature.  
H. Robert Malinowsky, et al. Littleton, Colorado: Libraries Unlimited, 1976.
4. Scientific and Technical Information Sources.  
Ching-Chih Chen. Cambridge, Massachusetts: MIT Press, 1977.
5. Walford's Guide to Reference Material. Volume I: Science and Technology.  
Fourth edition. Edited by A.J. Walford. London: The Library Association, 1980.