

Abstracts and Indexes
in Science and Technology
A Descriptive Guide

by
Dolores B. Owen

Second Edition

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PREFACE

The purpose of this book, as the title reflects, is to provide a description of the materials one would encounter in conducting a literature search in science or technology. It is by no means intended to be a definitive bibliography, nor is an attempt made to analyze all the idiosyncrasies of every index or abstracting tool included. Instead, it is hoped to facilitate the use of these materials by means of an outline which provides an introduction to their use, gives some indication of their content, and presents researchers with an idea of what they might expect from them. Some of the works, particularly several of those carried over from the first edition, have ceased publication, but most of the material is current. Coverage has been increased in this revision from 125 to 223 titles.

All components of the outline do not always fit the publications included. When this occurs, that segment is omitted, except in the case of "Abstracts." In these instances (almost all indexes, for example), it is stated that this term is not applicable and a description is given of the type of entries found in the publications.

A broad subject arrangement has been utilized, and within the subjects the titles are arranged alphabetically. The choice of a subject for a particular title may not always concur with that which the user would adopt. There are several examples of this, but it is particularly conspicuous of anthropological material placed with "Earth Science." This assignment was based on the premise that physical anthropology fits more comfortably in this category than in any other. If the researcher fails to find an entry where expected, the "Index" or "Table of Contents" will guide him to its location.

The Index includes current titles, variant or superseded titles, and in most cases entries for parts or sections of a publication if those parts have a specific or familiar title.

There are no index entries for country except for U.S. Government Reports Announcements and its variations. Institutions, organizations, bureaus, or departments are listed, when they help guide the user to a certain title. There are also index entries for miscellaneous material found in the text.

A new element has been added to the outline in this edition to accommodate information found in databases. With the advent of online bibliographic searching and its ever-widening availability, this aspect of a bibliographic source seems essential. The name of any available databases has been supplied, the beginning date of a machine readable version of an index or abstract journal is given, and the frequency of updates and the availability of keywords and abstracts is provided whenever possible. Information concerning vendors and prices for the various databases has not been given, principally because of continual change.

The first edition of this title was produced because my then co-author, Marguerite Hanchey and I felt the need for such a description. Marguerite died in 1974 before final publication of that work. This second edition comes about by a similar need for a revision and an updating of the original book. My only regret has been that I have not had her encouragement and guidance to help see it through.

I wish to thank my friends at the Troy H. Middleton Library at Louisiana State University in Baton Rouge for their help and encouragement in this endeavor, my husband, Travis, for his patience, Dru Menard for her typing, Cindy Rice for her ruined eyesight acquired by proofreading, and the Interlibrary Loan Librarians of the world for their efforts in my behalf. I am grateful also to the publishers and editors of the material included for their help and advice with the descriptions. Material from H. W. Wilson publications was reproduced by permission of that company.

INTRODUCTION

Following is an example of the outline devised to explain the titles included in this description, with an indication of what each segment of that outline is intended to convey.

Arrangement:

Describes how the material is presented in the various publications (by subject, title, author, or by some other method).

Coverage:

Gives an indication of the subject matter contained in the publications, and sometimes extends to the type of material (patents, symposia, books, etc.).

Scope:

Shows the origin of the publications covered; the term "International" designates worldwide coverage.

Locating Material:

Tells how to access the information contained in the publications.

Abstracts:

Discusses the entries one will encounter and gives details of the abstracts if they occur.

Indexes:

Gives the user an idea of what to expect from the indexes in the publications and relates their frequency, type, cumulations, etc.

Other Material:

Explains features in the publications not covered by other segments of the outline.

Periodicals Scanned:

Indicates that a list of the periodicals used in compiling the abstracts and indexes is provided, and gives its location and frequency if possible.

Databases:

Notes the availability of online sources for the printed material.

Each main entry in this description denotes the current title of the publication, its beginning date (and ending date if it has ceased), the publisher, frequency and a brief bibliographic history if this seems important. This history includes such items as superseded titles, forerunners and predecessors.

It is hoped that this format will prove most useful for the researcher seeking information, and facilitate the librarian's explanation of how it can be obtained.

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GENERAL

AIR UNIVERSITY LIBRARY INDEX TO MILITARY PERIODICALS, 1949-

U.S. Air University Library. Quarterly with annual cumulations. (Triennial cumulations until 1952-67). Formerly: Air University Periodical Index.

Arrangement: Alphabetical by author and subject, interfiled. As this is an index of military periodicals one is bound to see an abundance of military terms.

Coverage: Subject matter is varied and includes material other than scientific and technical information, e.g., economics, military law, and history. One may expect to find such terms as aeronautical research, communication systems, hydrography, navigation, and space as subject entries.

Scope: Limited to English language military periodicals. It is specifically stated that those included are not generally found in commercial indexing services.

Locating Material: The subject terms are arranged alphabetically with agencies listed directly under their names as subjects. Authors' names are interfiled with subjects. Military services of other countries are listed by the type of service, subdivided by country. The searcher will find book reviews grouped together under that term as a subject. The entries are listed alphabetically by title under each subject entry. There are "see" and "see also" references to alternative terms. All articles by an author are found listed alphabetically under his name and under the proper subject entry. Complete citations are given in both places.

Abstracts: Not applicable. Entries list title, author and journal citation. Illustrative material is noted.

Other Material: Book reviews are found grouped together under that term. A brief statement covering the arrangement and an explanation of the entries are found in the preliminary pages of each issue. A list of abbreviations and a "key to abbreviations" are provided.

Periodicals Scanned: A list is in each quarterly and annual issue.

ANTARCTIC BIBLIOGRAPHY, 1965-

U.S. Library of Congress, Science and Technology Division
(Distributed by the U.S. Government Printing Office). Annual. Material first appears in monthly issues under the title Current Antarctic Literature.

Arrangement: The material is arranged by subject. Items that apply to more than one category will be found in only one section and cross referenced at the end of other pertinent sections.

Coverage: Biology, medical sciences, geology, atmospheric and terrestrial physics, meteorology, oceanography, logistics, political geography, expeditions, cartography, and ice and snow are among the subjects included. The coverage begins in volume one with material from 1962.

Scope: International.

Locating Material: Entries are arranged chronologically by accession number within each subject section. The numbering began with volume one in 1965 and continues through all the volumes. Each subject section is given a letter and this precedes each entry (e.g., A, general; B, biological sciences; C, cartography; D, expeditions; etc.). Index entries refer to these letters and numbers.

Abstracts: Titles are given first in English, then in the language of the article. All authors are listed. The Introduction states that "...as a rule, the abstracts are informative rather than descriptive" and generally author abstracts are used unchanged or altered only for the sake of brevity or conformity to the guidelines of the bibliography. If modification has been made, this is noted. The number of references, the language of the article, and an indication as to whether there is an English summary are given.

Indexes: An author index that includes co-author and journal titles for anonymous articles, a subject index with headings, sub-headings, and numerous "see" and "see also" references are provided. A geographic index that gives names of places, stations, and geographic features (approved by the U.S. Board on Geographic Names), and a grantee index which names institutions or organizations that received financial support from the National Science Foundation for abstracts or works that are included are also furnished. The entries refer to the letters for subject sections and accession numbers within each section. A cumulative index to volumes 1-7 appeared in 1977. This contains the same four indexes and references are to volume, subject letter, and accession number. In the author, subject, and geographic indexes, the titles are given in English, but the language of the article is indicated. In the

grantee index, reference is made only to volume and entry number.

Other Material: A companion volume, Antarctic Bibliography, 1951-1961 extends the coverage retrospectively for ten years. The earlier period is covered by a work published in 1951 by the U.S. Naval Photographic Interpretation Center titled Antarctic Bibliography which contained 5,500 items arranged by subject with an author index.

Periodicals: No list is provided. Although most of the publications are in the Library of Congress collection, some were made available from other institutions and some were review copies or reprints sent from publishers.

Database: Citations are available through COLD REGIONS from 1962 and are updated quarterly. Abstracts and keywords are provided. The Bibliography on Cold Regions Science and Technology is also included.

APPLIED SCIENCE AND TECHNOLOGY INDEX, (Vol. 46), 1958-H.W. Wilson Company. Monthly except July with quarterly and annual cumulations. Supersedes in part Industrial Arts Index, 1913-1957, and continues its numbering. (Material from Applied Science and Technology Index is reproduced by permission of the H.W. Wilson Company.)

Arrangement: Alphabetical by subject. Occasionally subheadings are found under broad areas. Under each subject heading and subheading the entries are alphabetical by title.

Coverage: Aeronautics, automation, chemistry, electricity and electronics, engineering, geology and metallurgy, industrial and mechanical arts, physics, transportation, etc. A list is provided on the cover of the monthly issues and the quarterly cumulations and in the "Prefatory Note" of the bound volume.

Scope: English language journals. Inclusion is determined by subscriber vote.

Locating Material: The searcher determines the proper subject area and scans the material.

Abstracts: Not applicable. Entries provide complete title, author and joint author, but only the first if there are more than two. Complete bibliographic information is given and illustrative material is noted. Frequent "see" and "see also" references guide the user to alternative terms.

Other Material: Abbreviations used in the entries and for the periodical titles are provided in the preliminary pages of each