

SELECTIVE GUIDE TO LITERATURE ON ENGINEERING GEOLOGY

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INTRODUCTION

This selective guide to literature in engineering geology has been prepared for use by upper division undergraduate students, graduate students, and faculty in engineering geology and other intersecting technical fields. It should also prove useful for information professionals who might not be familiar with this area of engineering, and for working engineers who wish to update their knowledge. An earlier guide to engineering geology was compiled for ASEE in 1987 by Cecilia Mullen. Most materials in this current guide have been published since 1984, with the exception of a few timeless classics.

An understanding of engineering geology is important to the success of man's interaction with the earth. Engineering geology is a descriptive discipline when it identifies and describes the elements and properties of the earth, and an evaluative discipline when it interprets geological data in relation to engineering work.

Several applications of engineering geology have a large specific literature all their own; earthquake engineering, transportation engineering, structures, tunnels, and flood control are a few of these. Since this guide covers the literature of engineering geology in its broadest scope, it includes materials germane to those disciplines. However, resources limited to those subfields are not included in the scope of this guide.

BIBLIOGRAPHIES

The bibliographies listed here cover geological literature broadly, and thus contain much that is relevant to engineering geology. Bibliographies which focus specifically on engineering geology can be found in most of the encyclopedia entries listed in this guide as well as in many of the texts and review books listed, and can be extracted from several of the electronic databases.

AGE *refdex*. Bangkok, Thailand: AGE Asian Information Center for Geotechnical Engineering, 1985-.

A continuation of *AGE Digest* and *AGE Abstracts*, this is the bibliographic index of holdings in the AGE Library, Bangkok. Approximately 3,000 new entries are added each year. From 1989 this is available only in microfiche format. It is indexed using the International Geotechnical Classification System into 12 very broad sections with 10 or more subsections per section.

Geotitles. Oxon, England: Geosystems, 1987-.

A bibliography of published works in a broad range of geosciences, including engineering geology. Items are arranged by subject according to Geosystems' thesaurus of geoscience, called "Geosaurus," which is included in each issue. In addition to this subject indexing, items are indexed by stratigraphy, geography, and author. For online equivalent, see *Geoarchive* in "Indexes and Abstracts" section of this guide.

GUIDES TO THE LITERATURE

The following guides are general to the literature of engineering, but they contain sections in which literature of engineering geology will be found. A few guides to the literature of geology are included because they contain information about how to find maps, geological survey reports, and data particular to field geology.

Anthony, L.J., ed. *Information Sources in Engineering*. 2nd ed. Boston: Butterworths, 1985.

This literature guide is arranged by major types of primary and secondary sources. Chapters on eighteen subjects are written by a variety of specialists. Specific to engineering geology are (1) highway, transport, and construction engineering (includes rock mechanics and soil engineering), (2) hydrology, hydraulics, and coastal engineering, and (3) offshore engineering. Includes listings of major government agencies; major journals; conferences; and textbooks and handbooks.

Cobb, David A. *Guide to U.S. Map Resources*. Chicago: American Library Association, 1990.

This is a guide to 919 map collections within the United States, arranged alphabetically by state, then city. Tables include the top ten map libraries in the following categories: libraries with more than 250,000 printed maps; academic institutions; public institutions; state and federal institutions; private collections; and collections of aerial photographs. For each library, location, access, physical equipment and space, persons in charge and staff, plus a brief description of the holdings by type of map, are included.

Guide to USGS Geologic and Hydrologic Maps. McLean, VA: Documents Index, 1992.

This is a list of all maps available from the USGS, arranged by theme, area, subject, and coordinate indexes. Addresses of regional USGS offices are included, but prices are not.

Hurt, Charles Deuel. *Information Sources in Science and Technology*. 2nd ed. Englewood, CO: Libraries Unlimited, 1994.

This volume includes information sources on the general history of some major science disciplines, including geosciences and technology, and civil and construction engineering. Sources include handbooks, dictionaries, encyclopedias, and guides to the literature. Brief annotations indicate strengths and limitations of each title, and usually mention the kind of use that is most appropriate—academic, research, public library, or practicing engineer.

Schenk, Margaret T. *What Every Engineer Should Know About Engineering Information Resources*. New York: Marcel Dekker, 1984.

These resources are arranged by types of engineering information, including standards and specifications, patents, reviews and yearbooks, trade literature, professional societies, maps, license review (guides, how and where to register, exam books), preparation of technical reports and other forms of technical writing. An appendix includes major sci-tech publishers and major technical societies.

Ward, D.C., M.W. Wheeler, and M.W. Pangborn. *Geologic Reference Sources: A Subject and Regional Bibliography of Publications and Maps in the Geological Sciences*. 2nd ed. Metuchen, NJ: Scarecrow Press, 1981.

Sources are arranged in categories which correspond to different subsections within the geosciences. Another section arranges materials by region. Approximately 140 key English language sources are listed under the headings of "Engineering Geology," "Rock Mechanics," and "Soil Science."

Wood, David N., Joan E. Hardy, and Anthony P. Harvey. *Information Sources in the Earth Sciences*. 2nd ed. London; New York: Bowker-Saur, 1989.

Sources are arranged in sections such as primary literature, secondary literature, translations, and maps. Each section is introduced by a well written essay defining its scope. Subject categories include engineering and environmental geology, geomorphology and hydrogeology, soil science, and history of geology.

PRINTED AND ELECTRONIC INDEXES AND ABSTRACTS

Indexes and abstracts are tools for locating not only journal articles, but also technical reports and conference proceedings, by subject or author. Indexes list articles covered in a selected group of publications and supply the information necessary to retrieve the articles.

Abstracts also include summaries for each article covered. Following is a list of Indexes/Abstracts which are either very specific to the field of engineering geology, or are broad in scope but with excellent coverage of the field of engineering geology. Most of these titles will be found in university libraries, and a few might be found in very large public libraries with strong science and technology collections. Indexes preceded by * are available in computerized format (CD-ROM, online, or diskette). Access to these databases is often available in university libraries, or individuals may establish their own accounts with database vendors. Major vendors through which a database may be accessed or purchased are named for each file and addresses are listed in the appendix.

***ASCE Annual Combined Index.** New York: American Society of Civil Engineers, 1982-. Online vendor: Civil Engineering Database, STN, updated bimonthly, 1975-.

This is the official key to papers and technical publications of the American Society of Civil Engineers, including manuals and reports on engineering practice, books, and conference papers. Subject and author indexes. Supersedes *ASCE Combined Index*, 1965-1981, which supersedes *Index to ASCE Publications*, 1950-1965.

***Applied Science and Technology Index.** New York: H.W. Wilson, 1958-. CD-ROM: *WilsonDisc*, H.W. Wilson, updated monthly, 1983-. Online vendor: *WilsonLine*, H.W. Wilson, updated three times per week, 1983-.

A subject and author index to over 400 English language journals in the applied sciences. Since 1994 has included some abstracts. Supersedes *Industrial Arts Index*, 1913-1957. Published monthly (except July) and cumulated quarterly and annually.

***Bibliography and Index of Geology.** Alexandria, VA: American Geological Institute,

1969-. CD-ROM: *GeoRef*, Silver-Platter, updated quarterly, 1985-. Online vendors: GeoRef, Dialog, STN, 1985-.

Published originally by the Geological Society of America and formed by the merger of *Bibliography and Index of Geology Exclusive of North America*, 1893-1968, and *Bibliography of North American Geology*, 1732-1969, this is a comprehensive index of the earth science literature of the world, including books, serials, maps, reports, and, for North America, theses. Over 400 serials are indexed each month. No abstracts. Subject terms used are from the *GeoRef Thesaurus and Guide to Indexing*. Monthly, with annual cumulations. The online version also includes the *Bibliography of Theses in Geology*, 1965-66; *Geophysical Abstracts*, 1966-71; and the *Bibliography and Index of Micropaleontology*, 1972-.

Compendex-Plus. See *Engineering Index*.

***Current Contents—Engineering, Technology and Applied Sciences.** Philadelphia, PA: Institute for Scientific Information, 1975-. Online vendor: Dialog, 1990-. On diskette: Institute for Scientific Information.

Issued weekly, this reproduces the tables of contents of about 700 journals in various fields of engineering. Each issue contains an author index and address directory. Also available on diskette as *Current Contents on Diskette*, and online as *Current Contents Search*.

***Dissertation Abstracts International B: The Sciences and Engineering.** Ann Arbor, MI: University Microfilm International, 1969-. CD-ROM vendors: UMI, updated semi-annually, 1985-. Online vendor: Included in *Dissertation Abstracts Online*, Dialog, 1861-.

Abstracts of doctoral dissertations throughout the world, searchable by author, subject, and granting institution. Continuation of *Dissertation Abstracts B: The Sciences and Engineering*, 1938-1969. Issued monthly with cumulative indexes 1861-1972, 1973-1977, and then annually thereafter.

Engineering Geology Abstracts. Alexandria, VA: American Geological Institute, 1984-.

A subset of the *Bibliography and Index of Geology*, this provides quarterly abstracts of worldwide engineering geology literature from journals, monographic serials, university and survey publications, symposia and conference papers, as well as North American and European theses or dissertations and USGS and Bureau of Mines reports and maps.

***Engineering Index Monthly.** New York: Engineering Information, Inc., 1884-. CD-ROM: *Compendex-Plus*, updated quarterly, 1985-. Online vendors: *Compendex-Plus*, Dialog, STN, 1970-. Magnetic tapes: Engineering Information, Inc.

A comprehensive indexing and abstracting service covering engineering and its subdisciplines. Sources include over 4500 journal titles, reports, books, and symposium papers published in over 20 languages, with English abstracts. Monthly, with annual cumulative author and subject indexes. Subject index includes Thesaurus terms and free language terminology since 1988. *PIE: Publications Indexed for Engineering* is the annual listing of what this index covers.

Geoarchive. Oxon, England: Geosystems; 1974-. CD-ROM vendor: National Information Services Corporation, updated quarterly, 1974-. Online vendor: Dialog, updated monthly, 1974-.

CD-ROM which includes all the printed publications from Geosystems since 1974, plus worldwide coverage of geology and related disciplines contained in maps, serials, books, conference proceedings, doctoral dissertations, and some technical reports. Indexing is based on Geosaurus, which is included on disk. Updated quarterly. No abstracts. Excellent coverage of Eastern Europe and the former Soviet Union. Over 700,000 records worldwide.

GeoRef. See *Bibliography and Index of Geology*

Geotechnical Abstracts. [Essen, Germany]: German National Society of Soil Mechanics and Foundation Engineering, 1970-1993.

Over 15,600 abstracts per year from more than 500 international periodicals and conferences. Endorsed by the International Society for Soil Mechanics and Foundation Engineering. Uses the International Geotechnical Classification System for subject arrangement. By separate subscription, Geodex Retrieval System provides 400 punched retrieval cards for subject access to the abstracts. Many of the later abstracts have clear drawings and diagrams.

***Government Reports Announcements and Index.** Springfield, VA: National Technical Information Service, 1975-. CD-ROM: *NTIS*, updated quarterly, 1980-. Online vendors: *NTIS*, Dialog, STN, 1964-.

The merger and continuation of *Government Reports Index*, 1946-1967, and *Government Reports Announcements*, 1967-1975. Indexes and abstracts unclassified technical research reports sponsored by over 200 U.S. government agencies and research facilities. Published biweekly, indexed by keyword, personal and corporate author, contract and report numbers. Cumulative annual indexes.

International Journal of Rock Mechanics and Mining Sciences and Geomechanics Abstracts. London: Pergamon, 1964-.

Each monthly issue contains 5 to 8 full-length articles in the broad field of rock mechanics and mining sciences. The remainder of each issue contains abstracts on geomechanics arranged in a classified system. Indexes primarily English language journals, with some reports and conferences included. Shorter articles called "technical notes" are included, and some book reviews. Annual indexes include author, keyword subject, and project name.

NTIS. See *Government Reports Announcements and Index*.

***Selected Water Resources Abstracts.** Reston, VA: U.S. Geological Survey. 1968-. CD-ROM: *Water Resources Abstracts*, SilverPlatter, updated quarterly, 1968-. Online vendor: *Water Resources Abstracts*, Dialog, 1968-. Magnetic tape: Available from *NTIS*, 1968-.

Published monthly by the USGS, provides abstracts of current and earlier pertinent monographs, journal articles, and reports on all aspects of water. Citations are arranged broadly using the Water Resources Thesaurus into 10 fields and 60 subfields. Field 8, "Engineering Works," contains the abstracts most pertinent to engineering geology. Subject index, author, and organization index.

Abstracts with Programs. Boulder, CO: Geological Society of America, Inc., 1969-.

Published in advance of the annual meeting of the Geological Society of America and meetings for specific GSA sections, this listing includes the planned program and abstracts of papers to be presented. It covers all areas of geology, including engineering geology.

ENCYCLOPEDIAS

The following encyclopedias contain in-depth articles, written by specialists in their field, on a variety of topics in and related to engineering geology. Most of these articles conclude with up-to-date definitive bibliographies on their topics.

Finkl, Charles W., Jr., ed. *The Encyclopedia of Applied Geology*. New York: Van Nostrand Reinhold, 1984. (Volume 13 of *Encyclopedia of Earth Sciences*).

Entries in this encyclopedia present the applications of various aspects of geology to economic, engineering, water-supply, and environmental concerns. It focuses on geology as it is applied to human activity—geology in the service of man. A bibliography follows each major entry. *See references* are available for most entries. Articles range from 2 to 20 pages in length and are illustrated with photos, diagrams, tables, and charts. An extensive subject and author citation index complete the work.

Finkl, Charles W., Jr., ed. *The Encyclopedia of Field and General Geology*. New York: Van Nostrand Reinhold, 1988. (Volume 14 of *Encyclopedia of Earth Sciences*).

Originally planned as part of Volume 13 of the *Encyclopedia of Earth Sciences-Applied Geology*, this augments that volume in its applicability to the fields of engineering geology. It covers exploration surveys, geotechnical engineering, field techniques, maps and map techniques, prospecting and mining, expansive soils, and geological effects of cities. Most entries are cross-referenced and have brief, focused bibliographies. Author citation index and subject index. Particularly helpful are sections on how to create, use, and read geologic reports and maps and map symbols. This volume focuses on practical geology and methodologies for field geology; several entries focus on engineering geology.

Parker, Sybil P., ed. *McGraw-Hill Encyclopedia of the Geological Sciences*. 2nd ed. New York: McGraw-Hill, 1988.

Material in this single volume encyclopedia is drawn from the *McGraw-Hill Encyclopedia of Science and Technology*, 6th edition, 1987. Five hundred and twenty articles and over 650 illustrations cover all areas of the geological sciences, including engineering geology. Articles are written by experts in the field and some include limited bibliographies. Entries are signed and include "see" references. Illustrated with tables and figures, most with explanatory captions. Also included are drawings and some black and white photographs.

DICTIONARIES

The following selected dictionaries contain English definitions of technical terms related to engineering geology. Some also include technical drawings.

Bates, Robert L., and Julia A. Jackson, eds. *Dictionary of Geological Terms*. 3rd ed.

Garden City, NY: Anchor Press/Doubleday, 1984.

This dictionary contains brief definitions of the working vocabulary of the earth sciences, excluding highly specialized terms and jargon.

Bates, Robert L., and Julia A. Jackson, eds. *Glossary of Geology*. 3rd ed. Alexandria, VA: American Geological Institute, 1987.

This glossary contains over 36,000 North American terms. Many definitions cite references to both monographs and journal articles, which are listed in the back of the book as an inclusive bibliography. Terms which have meanings in more than one subject area are so indicated and given separate entries. Words have syllabication, cross references, and full narrative definitions.

Kearey, Philip, ed. *Encyclopedia of the Solid Earth Sciences*. Oxford, England: Blackwell Scientific Publications, 1993.

Even though this is called an encyclopedia, it functions more as a descriptive dictionary, whose main purpose is to define terms in the solid earth sciences. Entries range from a few sentences to several pages, with most being several paragraphs in length. Longer entries are followed by a list of highly selective references. This source contains 2,700 entries, with a keyword index and cross references. Line drawings and diagrams are clearly reproduced. Each entry is initialed by its expert author, who are all British leaders in their field.

Parker, Sybil P., ed. *McGraw-Hill Dictionary of Earth Science*. New York: McGraw-Hill, 1984.

Encompasses 18 fields, with scope notes defining each of them. Two of the 18 fields are engineering and engineering geology. More than 15,000 terms are defined, with synonyms, antonyms, and abbreviations (but not acronyms) given where appropriate.

Somerville, S.H. and M.A. Paul. *Dictionary of Geotechnics*. London; Boston: Butterworths, 1983.

A list of terms expected to be used by geotechnical engineers, covering the fields of soil mechanics, rock mechanics, soil and rock engineering, site investigation, and hydrology. Acronyms of major societies are interfiled with words; clear line drawings are included of some equipment and processes. Appendixes include 20 tables covering the physical properties of rocks and soils.

HANDBOOKS AND MANUALS

The following handbooks were selected for their breadth, currency, and accuracy. They contain materials in the form of discussions, charts, tables, diagrams, and figures to assist the geotechnical engineer find quickly accessible answers to common questions.

Bell, F.G. *Ground Engineer's Reference Book*. London; Boston: Butterworths, 1987.

A large work of 1160 pages, arranged in 5 sections: Part 1. Properties and behavior of ground material; Part 2. Investigation in ground engineering-various means by which ground is investigated; Part 3. How ground can be or needs to be improved before it can be developed; Part 4. Construction ground engineering; and Part 5. Numerical methods and modelling in ground engineering. Entries are written by specialists from around the world and include clear and numerous black and white photos, tables, and drawings. Each part has subsections, bibliographies, and its own extensive table of contents. A detailed index covers the whole.

Carmichael, Robert S. *Practical Handbook of Physical Properties of Rocks and Minerals*. Boca Raton, FL: CRC Press, 1989.

This volume contains physical data in tabular and graphical form for quick reference. It is arranged in 10 sections, each of which is introduced with text which defines and explains the kind of data to follow. Data ranges from scales at the molecular and crystalline level, to terrestrial studies of the earth and other planetary bodies. Each section is described by a subject specialist. An extensive bibliography follows each section. One section of particular interest to engineering geologists is titled "Engineering Properties of Rocks and Minerals."

Carter, M. *Geotechnical Engineering Handbook*. London: Pentech Press; distributed in the USA by Chapman and Hall, 1983.

This handbook presents common aspects of site investigation and geotechnical design. It contains charts, tables, and data sheets for use by geotechnical engineers on such topics as: field and laboratory test procedures, including advantages and limitations; instrumentation; settlement calculations; foundations; slope stability; and seepage analysis. Each section is introduced by a narrative text. Each data sheet has a list of references.

Fookes, P.G. *A Handbook of Engineering Geomorphology*. Surrey, England: Surrey University Press; New York: Chapman and Hall, 1986.

This volume contains essays in 22 different sections, written by British specialists, with engineering problems and applications for each, references, and a bibliography. Sections are categorized by environment (wetlands, mountains and high-

lands, fluvial environments, coasts). Appendixes include how to make visual estimations of such things as coverage of an area or pebble or stone size and shape.

Head, K.H. *Soil Technicians' Handbook*. London: Pentech Press; New York: Halsted Press, 1989.

This handbook is a ready reference version of the authors three-volume "Manual of Soil Laboratory Testing," which it refers to for fuller coverage of some of the topics. It includes quickly referenced definitions, formulas, and tables for types of soils, physical characteristics and properties of soils, testing flow, compaction, and compression of soils.

Arranged in 30 short sections, which are listed in the table of contents. No index.

Hunt, Roy E. *Geotechnical Engineering Investigation Manual*. New York: McGraw-Hill, 1984.

Designed as a handbook to merge geology and civil engineering, this work discusses investigation methods, characteristics of geologic materials and formations, and geologic hazards.

Karrow, Paul F. and R.F. Leggett. *Handbook of Geology in Civil Engineering*. 3rd ed. New York: McGraw-Hill, 1983.

The book is a descriptive overview of what an engineer working in the field should know about geology. It is arranged in five major sections: 1. Geological background (basics of geology, soil and rock mechanics; origin and structure of rocks, groundwater, climate); 2. Preliminary studies (basics of site investigation, maps, natural and man-made materials); 3. Civil engineering works (dams, tunnels, water applications, transportation); 4. Special problems (subsidence, landslides, erosion, problem soils, earthquakes); and 5. Geology and the environment (planning, conservation, civil engineering). Chapters within each of these sections conclude with lists of further readings. Appendixes include glossary of terms, geological surveys and societies of the world, lists of some useful journals, and illustration credits. Includes a name and subject index.

STANDARDS AND SPECIFICATIONS

Engineering standards are rules governing the uniformity, size, quality, performance, shape, definition, and testing methodology of manufactured products, systems, and methods.

American Society for Testing and Materials. *Annual Book of ASTM Standards*. Philadelphia, PA: ASTM.

ASTM is one of the largest voluntary standards development systems in the world. It publishes standards on a wide variety of subjects and methods, written by different standards writing bodies. Of particular interest to engineering geology are standards on soil and rock testing and analysis; ground water standards; and rock mechanics. The *Annual Book of ASTM Standards* is issued in 15 major sections. "Construction" and "Water and Environmental Technology" are the most appropriate to Engineering Geology. Indexed by standards number and by subject.

IMPORTANT BOOKS: SURVEYS, TEXTS, HISTORICAL REVIEWS

The following titles have been selected because of their comprehensive coverage of topics within engineering geology, clarity of presentation, and historical significance. While they contain much that is also in handbooks, the information is presented within a narrative context, to be read and studied, rather than referred to quickly. They are also sources of bibliographic listings on various topics in engineering geology.

Bell, F.G., ed. *Engineering in Rock Masses*. Boston: Butterworth-Heinemann, 1992.

This volume deals with rocks themselves, their behavior and investigation, and construction in and on them. It is a state-of-the-art survey, both theoretical and practical. Written by worldwide specialists, its information is arranged in 26 sections, each with its own extensive bibliography. A detailed index includes tables and figures in addition to text.

Goodman, Richard E. *Engineering Geology: Rock in Engineering Construction*. New York: Wiley, 1993.

This is an excellent undergraduate text and a compilation of what is known about the performance of different types of rocks in engineering construction.

Hudson, John A., ed. *Comprehensive Rock Engineering: Principles, Practice and Projects*. 1st ed. Oxford; New York: Pergamon Press, 1993.

In 5 volumes: 1. Fundamentals; 2. Analysis and Design Methods; 3. Rock Testing and Site Characterization; 4. Excavation, Support and Monitoring; and 5. Surface and Underground Project Case Histories. This is the distilled experience of experts from around the world and was compiled to stand as a benchmark of the field of rock mechanics during its 30-year history, since the founding of International Society of Rock Mechanics. It is particularly strong as a collection of case studies in a variety of applications. Each volume has approximately 30 chapters, written by subject specialists and containing extensive bibliographies. Volumes 1-4 each has its own index, with a cumulative index contained in Volume 5.

LECTURE SERIES

These lectures, named in honor of the the British engineer and physicist William John Maquorn Rankine (1820-1872), represent a three-decade history of some of the most acclaimed work in the field of soil mechanics.

Milestones in Soil Mechanics: The First Ten Rankine Lectures, 1961-70. London: Telford, for the Institution of Civil Engineers, 1975.

Developments in Soil Mechanics : The Second Ten Rankine Lectures, 1971-1980. London: Telford, for the Institution of Civil Engineers, ©1983.

Landmarks in Soil Mechanics: The Rankine Lectures, 1981-1990. London: Telford, 1992.

These lectures are in honor of Karl Terzaghi (1883-1963), considered one of the pioneers of modern engineering geology, and provide a record of important research in the field of engineering geology since 1963.

Terzaghi Lectures, 1963-1972. New York: American Society of Civil Engineers, 1974.

Currently out of print, but available from UMI Books on Demand.

Terzaghi Lectures, 1974-1982. New York: American Society of Civil Engineers, 1986.

MAJOR PERIODICALS

Following is a select list of refereed journals with in-depth coverage of the research of engineering geology.

Canadian Geotechnical Journal/Revue Canadienne de Geotechnique. Ontario: National Research Council of Canada, 6 issues/year, 1963-.

Articles on all aspects of geotechnical engineering, historical and contemporary. Contains book reviews.

Engineering Geology, An International Journal. Amsterdam: Elsevier, 3 volumes/year, 1965-.

Original studies, case histories, and comprehensive reviews in engineering geology. Contains book reviews.

Geotechnical Testing Journal. Philadelphia, PA: American Society for Testing and Materials, quarterly, 1978-.

A forum for exchange of ideas and research on soil and rock testing, particularly as it leads to development of new test procedures. One of four ASTM testing journals, this one is under the guidance of the ASTM Committee D-18 on Soil and Rock.

Geotechnique: International Journal of Soil Mechanics. London: Telford for the The Institution of Civil Engineers, quarterly, 1948-.

Papers and technical notes in French and English, with particular emphasis on case studies and original work applicable to civil engineering practice. Contains book reviews.

International Journal of Rock Mechanics and Mining Sciences and Geomechanics Abstracts. Oxford, England: Pergamon, 6 issues/year, 1964-.

Articles and technical notes on rock mechanics and rock engineering and related fields of mining and civil engineering. **Geomechanics Abstracts** provides indexing by subject category and abstracts of over 2,000 references a year for articles on similar topics published elsewhere.

Journal of Geotechnical Engineering. New York: American Society of Civil Engineers, monthly, 1956-.

Published by the Geotechnical Engineering Division of ASCE, includes research on all aspects of geotechnical engineering, with a slant towards practice and case histories.

Rock Mechanics and Rock Engineering. Vienna: Springer-Verlag, quarterly, 1929-.

Research articles and book reviews in English, French and German.

Reviews in Engineering Geology. Boulder, CO: Geological Society of America, irregular, 1961-.

Occasional monographs on topics such as Geology Under Cities, Land Subsidence, Neotectonics, and Debris Flows/Avalanches.

Soils and Foundations. Tokyo, Japan: Japanese Society of Soil Mechanics and Foundation Engineering, quarterly, 1960-.

Research articles and discussions.

MAJOR CONFERENCES AND PROFESSIONAL SOCIETIES

Conference proceedings are timely and detailed sources of technical information in engineering geology, often more important than the journal literature. They appear in many different forms, e.g., as special issues of journals, or as books in a series. Often a conference proceeding is an up-to-date review of a particular topic. The following is a selected list of organizations whose conferences occur regularly and for which proceedings are published. Some of these organizations publish other special publications in addition to conference proceedings.

**American Society of Civil Engineers (ASCE),
especially the Geotechnical Engineering Division**

Association of Engineering Geologists (U.S.)

Geological Society of America

Institution of Mining and Metallurgy (Great Britain)

International Association of Engineering Geologists

International Society for Engineering Geology

International Society for Rock Mechanics

**International Society of Soil Mechanics and Foundation
Engineering**

**Society of Mining Engineers of the American Institute of
Mining, Metallurgy and Petroleum Engineers
(SME/AIME)**

Research relevant to engineering geology is often found in the technical publications of the following government agencies, which are indexed by and available from NTIS (National Technical Information Service):

U.S. Environmental Protection Agency

U.S. Bureau of Reclamation

U.S. Army Corps of Engineers

U.S. Geological Survey

APPENDIX—SELECTED INFORMATION SERVICES

Dialog Information Services
 3460 Hillview Avenue
 P.O. Box 10010
 Palo Alto, CA 94303-0993
 800/334-2564

Engineering Information, Inc.
 Castle Point on the Hudson
 Hoboken, NJ 07030
 201/216-8500

Institute for Scientific Information
 3501 Market Street
 Philadelphia, PA 19104
 800/523-1850

National Information Services Corporation
 Suite 6, Wyman Towers
 3100 St. Paul Street
 Baltimore, MD 21218
 410/243-0797

SilverPlatter Information, Inc.
 100 River Ridge Dr
 Norwood, MA 02062-5026
 800/343-0064

STN International
 2540 Olentangy River Road
 P.O. Box 3012
 Columbus, OH 43210
 800/753-4227

University Microfilms International
 300 North Zeeb Rd.
 Ann Arbor, MI 48106
 800/521-0600

H.W. Wilson and Company
 950 University Avenue
 Bronx, NY 10452
 800/588-8400