

# Major Reference Sources in Earth Sciences

## An Annotated Guide

This guide lists major reference sources in the Earth Sciences. Most titles are held in the Reference Collection at the Earth Sciences Library. Key reference sources held in selected branches are also included. Selected electronic reference sources are also included. Access to electronic resources is restricted to University of Melbourne staff & students outside the library. The list is organised alphabetically in broad subject categories.

If you cannot find your reference title here, check the Library catalogue or ask at the Information Desk.

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## Atlases

- 912.1333            **Atlas of Australian resources.**  
70994                Canberra : Division of National Mapping, 1980-1990  
ATLA                 3<sup>rd</sup> series

Comprised of 6 volumes as follows: v. 1. Soils and land use -- v. 2. Population -- v. 3. Agriculture -  
- v. 4. Climate -- v. 5. Geology and minerals -- v. 6. Vegetation. Principal maps 1:5,000,000 or  
1:10,000,000; supplementary maps at various scales.

- 912.945            **Atlas of Victoria / edited by J.S. Duncan.**  
ATLA                Melbourne : Victorian Government Printing Office on behalf of the Government  
of Victoria, 1982.

Includes chapters on: relief, landsat imagery, geology, earthquakes, physiography, climate, water  
resources, groundwater resources, land types, bushfires, vegetation, wildlife, prehistory, history,  
population, Melbourne, provincial cities, employment, manufacturing rural production, vermin,  
weeds, minerals, oil and natural gas, energy, the coast, transport, the media, education, hospitals,  
community welfare, sport and recreation, parks and reserves, the national estate, electoral  
geography, regions, topography and a gazetteer. Maps are also accompanied by explanatory text  
and photographs.

- 551.60223           **Atlas of the surface heat balance of the continents : components and**  
HENN.               **parameters estimated from climatological data**  
Henning, Dieter.  
Berlin : G. Borntraeger, 1989.

- 555.10223           **Geologic atlas of China : an application of the tectonic facies concept to the**  
HSU.                 **geology of China**  
Amsterdam ; New York : Elsevier, 1999.

Includes an introductory section on the origins of mountains and tectonic-facies mapping. The  
atlas is then divided into regions of China – the Tibetan Plateau; northwest and north China;  
central China; south China and pacific China. Also includes a phanerozoic history of China.

- 554                 **Geological atlas of Western and Central Europe / by Peter A. Ziegler.**  
ZIEG.                The Hague : Shell Internationale Petroleum Maatschappij B.V., c1982.

Provides an overview of the tectonic and stratigraphic framework of Western and Central Europe  
and a summary of evolution in that area since later Silurian times.

- 912                 **The Times atlas of the world : tenth comprehensive edition.**  
TIME                New York : Times Books, c1999.

An index-gazetteer of over 200,000 geographical features including place names. It is fully cross-  
referenced with alternative and former names and is supported by a glossary of geographical  
terms. The index-gazetteer also includes satellite images of the continents taken from space.

## Bibliographies

- 550.922                    **Geologists and the history of geology : an international bibliography**  
SARJ :                    **from the origins to 1978 / by William A. S. Sarjeant.**  
v.1-5                    New York : Arno Press, 1980.
- 550.922                    **Geologists and the history of geology : an international bibliography from**  
SARJ :                    **the origins to 1978. Supplement, 1979-1984 and additions / by William A.S.**  
V.1. /V.2.                **Sarjeant.**  
Malabar, Fla., U.S.A. : R.E. Krieger Pub. Co., 1987.
- 550.922                    **Geologists and the history of geology : an international bibliography from**  
SARJ.                    **the origins to 1978 : supplement 2, 1985-1993, and additions / by William A.S.**  
                              **Sarjeant.**  
Malabar, Fla. : Krieger Pub. Co., 1996.

Originally published in 1978, this bibliography on the history of geology has continued to be updated via supplements in 1987 and 1996. Covers the origins and growth of geology; societies, associations and collections associated with geology; history of the petroleum industry and the biographies of geologists within those areas. Includes an author index in volume 5 of the original publication. Coverage includes all books, journals and articles published in languages using the Latin alphabet. The bibliography excludes languages such as Russian, Chinese, Japanese and Arabic etc. Coverage of Australian material may be as high as 85% of all publications on the history of geology. Entries are organised alphabetically.

For the original publication, the volumes are organised as follows:

- *Volume 1* - General introduction; general works; historical accounts of societies, museums and other institutions concerned with geology; accounts of events significant in the history of geology.
- *Volume 2* - Individual geologists A-K.
- *Volume 3* - Individual geologists L-Z; prospectors, diviners and mining engineers.
- *Volume 4* - Index of geologists by nationality and country; index of geologists by speciality.
- *Volume 5* - Index of authors, editors and translators; computerised bibliography production with cross reference indices.

For the first supplement, the volumes are organised as follows:

- *Volume 1* - General introduction; general works; historical accounts of societies, museums and other institutions concerned with geology; histories of the petroleum industries; accounts of events significant in the history of geology; individual geologists; prospectors, diviners and mining engineers.
- *Volume 2* - Index of geologists by nationality and country; index of geologists by speciality; Index of authors, editors and translators; index of women geologists.

For the second supplement, the volumes are organised as follows:

- *Volume 1* - Preface and introduction; general works; historical accounts of societies, museums and other institutions concerned with geology; accounts of events significant in the history of geology; individual geologists A-K.
- *Volume 2* - Individual geologists L-Z; prospectors, diviners and mining engineers; index of geologists by nationality and country; index of geologists by speciality; index of authors, editors and translators; index of women geologists.

016.551                    **Information sources in the earth sciences / editors, David N. Wood, Joan E. Hardy, and Anthony P. Harvey.**  
INFO                        London ; New York : Bowker-Saur, c1989.

Series of essays includes brief descriptions of various subject areas and lists the key journals, texts and other sources for that subject. Subjects include: geological maps and remote sensing; stratigraphy and regional geology; palaeontology; mineralogy and crystallography; geochemistry; petrology; structural geology and tectonics; geophysics; economic geology; engineering and environmental geology; geomorphology and hydrogeology; meteorology and climatology; soil science and the history of geology. Also included are sections on earth sciences libraries; primary literature; reference and review publications; bibliographies; abstracts and indexes; and computerised information services and geological databases.

016.5515.                **International bibliography of meteorology : from the beginning of printing to 1889 : four volumes in one: temperature, moisture, winds, storms / edited by James Rodger Fleming & Roy E. Goodman ; with a foreword by E. Philip Krider ; historical introduction by James Rodger Fleming.**  
INTE                        Upland, Pa. : Diane Pub. Co., 1994.

Revised edition of the Bibliography of Meteorology originally published in 1872. It is the major bibliographic resource on atmospheric sciences prior to Meteorological and Geostrophysical Abstracts which began in 1950. The new edition contains over 16,000 citations to meteorological and environmental literature published before 1889. Only one third of the entries are in English and 10% of entries are earlier than 1750. Includes all the errata, additions, corrections and supplements of the original four volumes. It has been divided into subject headings and subheadings and includes an author index at the end of each volume. Citations include author, title, format, place and date of publication. Maps, charts and plates are also included. Periodical references include abbreviated title, place of publication, volume number, year of publication and page numbers.

Topics covered include: agriculture, forestry, exploration, geography, hydrology, oceanography, geology and geophysics, maritime history, environmental history, literature and folklore, temperature and rainfall records, descriptions of hurricanes, snowstorms, shipwrecks and acid rain events.

## Dictionaries, Glossaries & Thesauri

550.3  
LAPI                    **Collins dictionary geology / Dorothy Farris Lapidus ; scientific adviser:  
Donald R. Coates ; consultant editor: Isobel Winstanley.**  
Glasgow : HarperCollins, 2003.

574.503  
CONC.                    **The concise Oxford dictionary of ecology / edited by Michael Allaby.**  
Oxford ; New York : Oxford University Press, 1994.

This dictionary aims to define terms and concepts relating to ecology, environmental pollution and conservation. Relevant terms from related disciplines are also included such as biogeography, animal behaviour, evolutionary theory, taxonomy, plant and animal physiology, climatology and meteorology, oceanography, hydrology, pedology, glaciology, and geomorphology. Brief biographical entries are included for people who have made significant contributions to ecology. Cross references are included.

*Online*                    **A dictionary of chemistry**  
*Resource*                Oxford Online Reference  
Access via Supersearch: <http://tinyurl.com/2am958>

4200 entries on common chemical terms. Covers areas such as physical chemistry, biochemistry, laboratory techniques, chemical engineering, and environmental matters. Also includes a full alphabetical table of elements and their properties.

*Online*                    **A dictionary of earth sciences**  
*Resource*                Oxford Online Reference  
Access via Supersearch: <http://tinyurl.com/29zqzf>

Includes 6000 terms on subjects such as climatology, economic geology, geochemistry, oceanography, palaeontology, petrology, and volcanology.

550.3  
DICT.                    **A dictionary of earth sciences.**  
Oxford ; New York : Oxford University Press, 1999.

Authorative source for all areas of earth sciences. Coverage includes: including climatology, economic geology, geochemistry, oceanography, palaeontology, petrology, and volcanology. Also available online via the library website.

550.3  
MICH                    **Dictionary of earth sciences : English-French, French-English = Dictionnaire  
des sciences de la terre : anglais-francais, francais-anglais / J.-P. Michel, R.W.  
Fairbridge.**  
Chichester ; New York : Wiley ; Paris : Masson, 1992.  
2nd ed., rev. and expanded.

**Online Resource**            **A dictionary of ecology**  
Oxford Online Reference  
Access via Supersearch: <http://tinyurl.com/yr365e>

The current edition is the 3<sup>rd</sup> edition and contains 5200 entries making it an authoritative source for ecology. Subjects covered biogeography, genetics, soil science, geomorphology, atmospheric science, and oceanography, plant and animal physiology, animal behaviour, pollution, conservation, habitat management, evolution, environmental pollution, climatology and meteorology.

**Online Resource**            **A dictionary of geography**  
Oxford Online Reference  
Access via Supersearch: <http://tinyurl.com/2a348t>

6000 entries giving comprehensive and authoritative coverage of all aspects of human and physical geography. Subjects include: cartography, surveying, meteorology, climatology, biogeography, ecology, geology, geomorphology, population, migration, agriculture, industry, transport, and development. Also includes key economic and population statistics.

550.3                            **Dictionary of geological terms / Robert L. Bates and Julia A Jackson, editors;**  
DICT                            **prepared under the direction of the American Geological Institute.**  
Garden City, N.Y. : Anchor Press, 1984.

622.03                            **Dictionary of mining, mineral, and related terms / compiled by the American**  
DICT                            **Geological Institute.**  
Alexandria, Va. : American Geological Institute in cooperation with the Society  
for Mining, Metallurgy, and Exploration, Inc., c1997.

910.0203                        **The dictionary of physical geography / edited by David S.G. Thomas and**  
DICT                            **Andrew Goudie.**  
Malden, Mass. : Blackwell Publishers, 2000.

Definitions and explanations of terms, key ideas, concepts and issues in physical geography, including areas such as biogeography, climatology, environmental change and geomorphology. Entries are organised alphabetically, cross referenced and include reading lists.

**Online Resource**            **A dictionary of physics**  
Oxford Online Reference  
Access via Supersearch: <http://tinyurl.com/257le7>

The 5<sup>th</sup> edition includes 3,700 entries on common terms and concepts used in physics. Covers subjects such as astronomy, astrophysics, and physical chemistry. Also included are in-depth analyses of key topics, biographies of important scientists, and chronologies of major discoveries.

503                      **A Dictionary of science / edited by John Daintith.**  
DICT                      Oxford University Press, 2005.

Over 9000 entries covering terms, concepts & laws relating to all aspects of the sciences. Subjects include physics, chemistry, biology, biochemistry, palaeontology & earth sciences, mathematics, astronomy, cosmology, biotechnology & computer technology. Coverage includes 160 biographical entries on the most important scientists in the history of science, as well as 10 chronologies showing the development of selected concepts, fields of study, and industries. The periodic tables, tables of SI units and conversion tables to and from other systems of units, and summary classifications of the plant and animal kingdom are also included.

*Online*                      **A dictionary of scientists**  
*Resource*                      Oxford Online Reference  
Access via Supersearch: <http://tinyurl.com/29srz4>

This is a biographical dictionary of scientists, and with 1600 entries covering 2,500 years, it is considered to be extremely comprehensive and authoritative. It covers key figures in all areas of science, such as physics, astronomy, medicine, ecology, mathematics and technology. Includes coverage of all Nobel Laureates in physics, chemistry, physiology, and medicine.

631.403                      **Dictionary of soil science / Jean Lozet, Clement Mathieu ; foreword by**  
LOZE.                      **Marcel Jamagne.**  
Rotterdam : Balkema, 1991.

Covers the physical, chemical and biological properties of soils, their evolution and use. Also includes related terms in mineralogy, agricultural hydrology and surface hydrology.

503.21                      **Dictionary of the physical sciences : terms, formulas, data / Cesare Emiliani.**  
EMIL.                      New York : Oxford University Press, c1987.

Covers physics (classical, relative, quantum, particle, high-energy); chemistry (inorganic, organic, physical); geology, geophysics, oceanography, meteorology, palaeontology and related areas of molecular, genetic and evolutionary biology; and cosmology, astronomy, astrophysics, and the genesis and evolution of the universe. Entries include definitions, explanations, formulas and other data.

*Online*                      **A dictionary of weather**  
*Resource*                      Oxford Online Reference  
Access via Supersearch: <http://tinyurl.com/yr292f>

1800 entries covering weather, forecasting, and climate terms as well as Key terms from the related fields of oceanography, hydrology, and climatology.

**ERC**                    **A dictionary of weather / Storm Dunlop.**  
551.603                Dunlop, S (Storm).  
DUNL                    Oxford : Oxford University Press, 2001.

This dictionary covers information relating to weather, climate & forecasting and related areas. Includes a list of weather records and key people in the development of meteorology.

**Online**                **A dictionary of weights, measures and units**  
**Resource**             Oxford Online Reference

1500 clear definitions of all the units, prefixes, and styling of the Système International (SI), as well as industry-specific and traditional terms currently in use.

551.503                **Elsevier's dictionary of climatology and meteorology : in English, French,**  
LUCC.                   **Spanish, Italian, Portuguese, and German / compiled by J.L. de Lucca.**  
                              Amsterdam ; New York : Elsevier, 1994.

Contains over 3000 common terms from all fields of climatology and meteorology including: agrometeorology, climatology, hydrometeorology, environmental meteorology, aeronautical meteorology, marine meteorology and radiometeorology. Definitions are also given in French, Spanish, Italian, Portuguese and German.

551.4803              **Elsevier's dictionary of environmental hydrogeology : in English, French, and**  
PFAN                    **German / compiled by Hans-Olaf Pfannkuch.**  
                              Amsterdam ; New York : Elsevier, 1990.

Elsevier's dictionary of environmental hydrogeology covers groundwater and groundwater contamination, hydrogeology, water resources and related areas. It is organised alphabetically in English with separate sections for French and German.

910.285                **Elsevier's dictionary of geographical information systems in English,**  
DELI                    **German, French and Russian / compiled by B. Delijska.**  
                              Boston : Elsevier, 2002.

This dictionary includes over 4,000 significant and frequently used terms from the theory and practice of geographical information systems. It covers: geoinformatics, geostatistics, computer cartography, geospatial databases, computer graphics, geodesy, photogrammetry, remote sensing, hardware and software for introduction, processing and visualization of geospatial data etc.

622.1503            **Encyclopedic dictionary of exploration geophysics / Robert E. Sheriff.**  
SHER                Sheriff, Robert E.  
                         Tulsa, OK : Society of Exploration Geophysicists, c1991.

550.3                **Glossary of geology / Julia A. Jackson, Editor.**  
GLOS                Alexandria, Va. : American Geological Institute, 1997.

Published by the American Geological Institute, definitions in the *Glossary of geology* include origins of terms and the date terms were first used; the meaning of common geoscientific abbreviations and acronyms; meaning of certain prefixes; the preferred term between two or more synonyms and the difference between look alike pairs. Expanded coverage is given to fields such as carbonate sedimentology, environmental geology and geophysics, GIS, GPS, hydrology and hydraulics, marine and coastal geology, organic geochemistry, palaeoecology, seismology, stratigraphic nomenclature, speleology and karst, and structural geology and tectonics.

551.4803            **Glossary of hydrology / William E. Wilson and John E. Moore, editors.**  
GLOS                Alexandria, Va. : American Geological Institute, 1998.

Published by the American Geological Institute. Provides the current or preferred meaning of a term and reflects usage in North American literature. Some definitions also include the original usage or historical development of a term. Obsolete terms have been included if they are still valuable for using older literature. Foreign language terms are only included if they have been used in English. Terms are cross referenced and multiple definitions are included where appropriate. Terms that have relevance to more than one subject area are also indicated.

551.5                **Glossary of meteorology / Todd S. Glickman, managing editor.**  
GLOS.                Boston : American Meteorological Society, 2000.

Covers all fields of meteorology but related subjects are only included if they directly impact on meteorology. Also includes slang, folk terms, acronyms, mathematical and statistical terms, and abbreviations. Entries are cross referenced. Some entries also include a bibliography of references.

549.032            **Glossary of mineral species 1995 / Michael Fleischer, Joseph A. Mandarino.**  
FLEI.                Tucson, Ariz. : Mineralogical Record, 1995

Alphabetical summary of mineral names for quick and easy reference. Emphasis is on the chemical composition, polymorphism, and relationships to other minerals. Each entry includes the chemical formula, the crystal system, the colour and the relationship to other minerals. Many entries also include references to either the first description, an abstract of the first description, or a recent and significant publication.

551.4803            **International glossary of hydrology**

INTE. *Paris, France : United Nations Educational, Scientific and Cultural Organization ; Gen{225}eve, Suisse : World Meteorological Organization, 1992.*

International glossary of hydrology includes hydrological terms in English, French, Russian and Spanish, their definitions and the Universal Decimal Classification (UDC) for hydrology. Alphabetical indexes for each language are also included. Definitions given are internationally accepted. Sources of the definitions are also included.

423 **The Macquarie dictionary.**  
MACQ North Ryde, N.S.W. : Macquarie Library, 2001.

550.3 **McGraw-Hill dictionary of earth sciences / Sybil P. Parker, editor in chief.**  
MCCR. New York : McGraw-Hill, c1997.

Defines over 10,000 terms from earth sciences and related fields. Multidisciplinary approach covering 9 subjects including climatology, geochemistry, geodesy, geography, geology, geophysics, hydrology, meteorology and oceanography. Definitions are identified by the subject in which they are primarily used. Also includes synonyms, acronyms and abbreviations. All definitions have been drawn from the *McGraw Hill Dictionary of Scientific and Technical Terms* (5<sup>th</sup> edition, 1994).

551.503 **Meteorological glossary / Meteorological Office ; [edited by R.P.W. Lewis]**  
GREAA London : HMSO, 1991.

025.49551 **Multilingual thesaurus of geosciences / edited by G.N. Rassam, J. MULT.**  
MULT. **Gravesteijn, R. Potenza**  
New York : Pergamon Press, c1988.

5,000 key terms expressed in English, French, German, Italian, Russian and Spanish. Terms are classed in 36 groups of which 20 match the major subdivisions of geosciences, 11 match the classification domains e.g. stratigraphy, rock names, elements etc., and the remaining 5 describe concepts common to all subdivisions, properties, methods etc. The majority of the main entries came from the American Geological Institution's Glossary of Geology. Also includes 6 language indexes.

423.1 **The new Oxford thesaurus of English / chief editor Patrick Hanks.**  
NEW Oxford : Oxford University Press, 2000.

The Oxford thesaurus contains synonyms (words with similar meanings); antonyms (words with opposite meanings); homonyms (same words with different meanings); related terms; noun lists; detailed studies of closely related synonyms; advice on confusable words and other features. Includes 480 tables giving additional relevant information to keywords that do not have a synonym – such as lists of different breeds or kinds of animals; birds and plants; famous artists, architects and scientists; or major volcanoes and the date of their last major eruptions.

**Online**                      **Oxford English Dictionary Online**  
**Resource**

The OED is the most comprehensive and authoritative English language dictionary. It provides the meaning, history and pronunciation of over half a million words. It is available online via the library catalogue (search by title). The online version is updated quarterly.

**Online**                      **Oxford Reference Online**  
**Resource**

Oxford Reference online is a collection of a number of reference works from Oxford University Press. It includes a number of dictionaries such as *Dictionary of Earth Sciences*, *Dictionary of Weather*, *Dictionary of Ecology*, *Dictionary of Astronomy* etc. and the *Oxford Companion to the Earth*. It is available online via the library catalogue (search by title).

551.4103                      **The regolith glossary : surficial geology, soils and landscape /Richard A.**  
REGO                              **Eggleton.**  
Floreat, W.A. : Cooperative Research Centre for Landscape Evolution and  
Mineral Exploration, 2001.

Contains terms commonly used in regolith sciences. The glossary clarifies meanings of words and provides consistency and uniformity in the use of regolith science terminology and how it has been used in regolith literature. Also includes photographs and diagrams.

## Encyclopaedias

550                    **The Cambridge encyclopedia of earth sciences / editor in chief, David G. Smith.**  
CAMB.                    New York, N.Y. : Crown Publisher/Cambridge University Press, 1981.

Key and classic reference source. Divided into six parts – 1. The Earth Sciences in Perspective – looks at the history of the earth and earth sciences. 2. Physics and Chemistry of the Earth – seismology, chemistry, mineralogy, geochemistry etc. 3. Crustal Processes and Evolution – volcanology, tectonics, sedimentation etc. 4. Surface Processes and Environments – atmosphere, climatology; oceanography, fossils etc. 5. Evaluation of Earth Resources and Hazards – remote sensing, economic geology etc. 6. Extraterrestrial Geology.

624.1510321        **The Encyclopedia of applied geology / edited by Charles W. Finkl, Jr.**  
ENCY                    New York : Van Nostrand Reinhold, c1984.  
                              Encyclopedia of earth sciences ; v. 13  
                              Access via Supersearch: <http://tinyurl.com/268ejn>

Applied geology is concerned with the application of aspects of geology to other areas such as economic, engineering, water-supply, and environmental problems. The encyclopedia includes topics mainly related to engineering geology, but also covering landscapes, earth materials and the management of geological processes. Also includes a list of references dealing with these topics such as abstracts and abstracting services, databases, periodicals, texts and reference works.

551.503                **Encyclopedia of atmospheric sciences / editor-in-chief, James R. Holton ; editors, Judith A. Curry and John A. Pyle.**  
ENCY                    Amsterdam ; London : Academic, c2003.

A key reference work in the atmospheric sciences, the *Encyclopedia of atmospheric sciences* contains 330 contributions in 6 volumes covering all major aspects of atmospheric science and cognate subjects. Covers the physical, dynamical and chemical processes active in the atmosphere and the interactions of the atmosphere with the land, the oceans and the biosphere. Articles are organised alphabetically, cross referenced and indexed.

551.5                    **The encyclopedia of atmospheric sciences and astrogeology, edited by Rhodes W. Fairbridge.**  
FAI                        New York, Reinhold Pub. Corp. [1967]  
                              Encyclopedia of earth sciences ; v. 2

Organised alphabetically, entries are cross referenced and include references for follow up.

551.503                **Encyclopedia of climate and weather / Stephen H. Schneider, editor in chief.**  
ENCY.                    New York : Oxford University Press, 1996.

Multidisciplinary encyclopedia covers both natural science topics and social science topics related to climate and weather. Areas covered include: physics, chemistry, astronomy, ecology, geography, geology, archaeology, oceanology, glaciology, agronomy, forestry, hydrology, health sciences, economics, history, political science and literature. Entries are cross referenced.

551.50321            **The Encyclopedia of climatology / edited by John E. Oliver, Rhodes W. Fairbridge.**  
ENCY.                New York : Van Nostrand Reinhold, c1987.  
Encyclopedia of earth sciences ; v. 11  
Access via Supersearch: <http://tinyurl.com/3yk2mo>

Entries are organised alphabetically, indexed and cross referenced. References have also been included at the end of each entry. Refer also to *The Encyclopedia of Atmospheric Sciences and Astrogeology* for standard terms not included in this volume.

551.457                **Encyclopedia of coastal science / edited by Maurice L. Schwartz.**  
ENCY                 Dordrecht ; [London] : Springer, c2005  
Encyclopedia of earth sciences series  
Access via Supersearch: <http://tinyurl.com/38bzlb>

Comprehensive and interdisciplinary, includes 245 contributions covering geomorphology, ecology, engineering, technology, oceanography and human activities as they relate to coasts. Entries are organised alphabetically, indexed and cross referenced. References have also been included at the end of each entry. This encyclopedia is part of the Encyclopedia of earth sciences series and updates and replaces *The Encyclopedia of beaches and coastal environments* (1982).

551.203                **Encyclopedia of earthquakes and volcanoes / David Ritchie and Alexander E. Gates.**  
RITC                 New York : Checkmark Books, c2001.

Covers earthquakes and volcanoes and their impact on human existence. Includes photographs & maps including plate tectonic scenarios; and diagrams showing the processes of formation. Description entries, maps, photographs and diagrams are all cross referenced.

333.7                    **Encyclopedia of environmental science / edited by David E. Alexander and Rhodes W. Fairbridge.**  
ENCY                 Dordrecht ; London : Kluwer Academic, c1999.  
Access via Supersearch: <http://tinyurl.com/2uttkq>

A multidisciplinary approach to the many fields of interest that comprise the environment. Includes information on the atmosphere, hydrosphere, biosphere and geosphere. The encyclopedia covers basic information as it relates to the environmental sciences as well as the leading theories and important debates in the area. Also included are assessments of future prospects for the environment with the increase in population, pollution and the transformation of land, air, water and vegetational systems. Entries are referenced and cross referenced.

551.03                    **Encyclopedia of European and Asian regional geology / edited by Eldridge**  
ENCY                    **M. Moores and Rhodes W. Fairbridge.**  
London : Chapman & Hall, c1997.  
Access via Supersearch: <http://tinyurl.com/3xpnwl>

Provides a current overview to the general geology of Europe and Asia (excluding the Arab countries and Israel). Entries are organised alphabetically by country and include information on the stratigraphy, structure, tectonics and the natural resources of each country as well as the history of geological exploration for that country. Unique issues for each country are also covered. International subjects such as Europe, Asia, the Alps, Caucasus, Himalayan and Tien Shan mountains are also included in additional articles. Entries include representative figures illustrating main geologic features and a selected bibliography of relevant publications.

*Online*                    **Encyclopedia of Field and General Geology**  
*Resource*                Earth Sciences Encyclopedia Online  
Access via Supersearch: <http://tinyurl.com/ypwt5c>

Provides an introduction to general field work through selected topics that illustrate specific techniques and methodologies such as aspects of exploration surveys, geotechnical engineering, environmental management, field techniques, mapping, prospecting, and mining.

551.903                    **Encyclopedia of geochemistry / edited by C.P. Marshall and R.W. Fairbridge.**  
ENCY                    Dordrecht ; Boston : Kluwer Academic Publishers, 1999.  
Access via Supersearch: <http://tinyurl.com/24g6jp>

A comprehensive encyclopedia for the subject of geochemistry. Covers 345 topics relating to different aspects of geochemistry including organics, trace elements, isotopes, high and low temperature geochemistry and ore deposits. Entries for the instruments used in geochemical techniques are also included as are the chemical elements with common mineralogical, petrological and sedimentological depictions. Each entry is cross referenced and includes a reference list for further reading. The encyclopedia is arranged alphabetically with comprehensive subject and citation indexes.

551.14                    **The encyclopedia of geochemistry and environmental sciences / edited by**  
FAI                        **Rhodes W. Fairbridge.**  
New York : Van Nostrand Reinhold, 1972.  
Encyclopedia of earth sciences ; v. 4A

Covers geochemistry - the chemistry of the planet earth and its compositional evolution. Coverage includes all elements in nature; important chemical cycles and processes; major mineral groups and species; and summaries of valuable economic ore deposits. The preface includes information about the history and nature of geochemistry. References are included with each entry and entries are cross referenced.

551.03                    **Encyclopedia of geology / edited by Richard C. Selley, L. Robin M. Cocks,**  
ENCY                    **Ian R. Plimer.**

Amsterdam ; London : Elsevier Academic, 2005.

The Encyclopedia of Geology is a major new reference work covering all aspects of geology. It includes 350 articles each dealing with a separate aspect of geology such as: earth history, earth materials, surface processes, regional geology, economic geology, engineering geology, petroleum geology, geochemical and mineral exploration, and the history of geology. Entries are organised alphabetically and are also cross-referenced and include further reading lists.

551.4  
FAI                    **The encyclopedia of geomorphology / edited by Rhodes W. Fairbridge.**  
New York, Reinhold Book Corp. [c1968]  
Encyclopedia of earth sciences ; v. 3  
Access via Supersearch: <http://tinyurl.com/23raeg>

551.4103            **Encyclopedia of geomorphology / edited by A.S. Goudie.**  
ENCY                London ; New York : Routledge, 2004.

Major new reference work on geomorphology – the study of the history and nature of the Earth's surface. A comprehensive guide including 700 entries and global coverage. Topics cover the major types of geomorphological processes as well as specific landforms and the major developments in areas such as tectonics, climate change, modelling, remote sensing and process measurement.

573.20321           **Encyclopedia of human evolution and prehistory / edited by Ian Tattersall,**  
ENCY                **Eric Delson and John Van Couvering.**  
New York : Garland Publishing, c1988.

Covers human evolution including: systematics, evolutionary theory, genetics, primatology, primate paleontology and paleolithic archaeology. Entries are organised alphabetical and about half have been cross referenced. Subjects are also given and are included in an index. Major subject areas include: evolutionary biology, morphology, primate taxa, human fossils – geology, paleontology, stratigraphy, chronology, fossil and archaeological localities by continent and age, archaeology, archaeological sites and industries by age and biological entries.

*Online*                **Encyclopedia of hydrological sciences**  
*Resource*            Wiley

200 articles on the key aspects of hydrological sciences.

551.4803            **Encyclopedia of hydrology and water resources / edited by Reginald W.**  
ENCY.                **Hersch and Rhodes W. Fairbridge.**  
Dordrecht ; Boston : Kluwer Academic, 1998.  
Encyclopedia of earth sciences series

Topics covered in this encyclopedia are numerous and are linked to either hydrology or water resources. Entries are organised alphabetically, cross referenced and indexed. Also includes a list of selected international journals in hydrology and water resources.

552.10321  
ENCY                    **The Encyclopedia of igneous and metamorphic petrology / edited by D.R. Bowes.**  
New York : Van Nostrand Reinhold, c1989.  
Encyclopedia of earth sciences  
Access via Supersearch: <http://tinyurl.com/ypjlsa>

549.0321  
ENCY                    **The Encyclopedia of mineralogy / edited by Keith Frye.**  
Stroudsburg, Pa. : Hutchinson Ross Pub. Co., c1981.  
Encyclopedia of earth sciences ; v. 4B  
Access via Supersearch: <http://tinyurl.com/2b5day>

The encyclopedia of mineralogy includes articles on mineralogical interests, activities, methods and a mineral glossary. Also includes 2 indexes to assist in locating information. The mineral glossary provides almost 3000 entries covering chemical composition, structural group and crystal system. 530 key minerals, determined by abundance, distribution and economic importance, are given more detailed entries. Entries also included references to further and more detailed information.

551.46003  
ENCY                    **Encyclopedia of ocean sciences / editor-in-chief, John H. Steele ; editors, Steve A. Thorpe, Karl K. Turekian.**  
San Diego : Academic Press, c2001.

6 volume major reference work from Academic Press. Includes over 350 articles on all aspects of ocean sciences from the latest information and research to the classic scientific theories. Contributors to the encyclopedia include many of the leading scientists in the area. Cross referencing, reading lists and detailed indexes are available to assist the user in finding material. Volume 1 also includes a *Guide to Use of the Encyclopedia*.

551.46  
FAI                        **The encyclopedia of oceanography, edited by Rhodes W. Fairbridge.**  
New York, Reinhold Pub. Co. [1966]  
Encyclopedia of earth sciences ; v. 1

Entries are organised alphabetically, cross referenced and include a reference list for further information.

560.3  
ENCY.                    **The Encyclopedia of paleontology / edited by Rhodes W. Fairbridge, David Jablonski.**  
Stroudsburg, Pa. : Dowden, Hutchinson & Ross ; [New York] : distributed by Academic Press, c1979  
Encyclopedia of earth sciences ; v. 7  
Access via Supersearch: <http://tinyurl.com/2a5j3y>

Covers all aspects of paleontology and related disciplines such as geochemistry, population biology, histology, botany, anthropology, and geophysics. Entries are organised alphabetically

and cross referenced. A subject index is also included. References to key literary sources are included with entries.

559.92                    **Encyclopedia of planetary sciences / edited by James H. Shirley and Rhodes**  
ENCY                    **W. Fairbridge.**  
Dordrecht ; Boston : Kluwer Academic Publishers, 2000.

Comprehensive coverage of the planetary sciences – the nature and evolution of the planets, satellites and smaller bodies of the solar system. Articles are arranged in several categories including: asteroids; astronomy; atmosphere; biographies; celestial mechanics and gravitation; comets; geology and geophysics; magnetic fields and the interplanetary environment; meteorites; missions to planets and the moon; planets; rings; satellites; the sun and solar physics; and techniques. All topics are arranged alphabetically and are cross referenced where appropriate. References to cited works are also included to assist in locating more detailed information. The accompanying CD-ROM contains over 200 images from the archives of NASA's National Space Science Data Center.

552.503                    **Encyclopedia of sediments & sedimentary rocks / edited by Gerard V.**  
ENCY                    **Middleton ; with associate editors Michael J. Church ...[et al.].**  
Dordrecht ; London : Kluwer Academic Publishers, c2003.

Revision of Encyclopedia of Sedimentology (1978).

551.0321                    **The Encyclopedia of solid earth geophysics / edited by David E. James.**  
ENCY                    New York : Van Nostrand Reinhold, c1989.  
Encyclopedia of earth sciences v.16  
Access via Supersearch: <http://tinyurl.com/2dp3q3>

Solid earth geophysics covers seismology, geodesy, gravimetry, geo – and paleomagnetism, magnetotellurics, tectonophysics and related areas in physics, geology and space sciences. Entries are organised alphabetically by subject and include references for further information. Also includes a comprehensive index and some entries are cross referenced.

551.80321                    **The Encyclopedia of structural geology and plate tectonics / edited by Carl K.**  
ENCY                    **Seyfert.**  
New York : Van Nostrand Reinhold, c1987  
Access via Supersearch: <http://tinyurl.com/2zkjqp>

Covers structural geology and plate tectonics. Entries are organised alphabetically and cross referenced. A list of main entries is provided in the introduction and an index is included to locate sub-topics.

551.03                    **The Encyclopedia of the solid earth sciences / editor-in-chief, Philip Kearey.**  
ENCY                    Oxford ; Melbourne : Blackwell Scientific, 1993.

Over 2700 entries covering all of the sub-disciplines of earth sciences. Entries are organised alphabetically, cross referenced and indexed. Synonyms are also included. Longer entries also include key references.

551.2103            **Encyclopedia of volcanoes / editor-in-chief, Haraldur Sigurdsson ; associate  
ENCY                editors, Bruce F. Houghton ... [et al.]**  
San Diego : Academic Press, c2000.

Comprehensively covers all aspects of volcanology. Topics include: the origin and transport of magma of eruptions; of effusive volcanism and explosive volcanism; extraterrestrial volcanism; volcano interactions; volcanic hazards; eruption response and mitigation; and economic and cultural aspects of volcanism. Topics are arranged in a thematic approach where volcanic processes are defined, described and elaborated. Entries include an outline, glossary of terms and a bibliography for further reading. Articles are also cross referenced.

551.6                **The encyclopedia of world climatology / John E. Oliver (ed.).**  
ENCY                Dordrecht : Springer, 2005.  
Encyclopedia of earth sciences.

Part of the Encyclopedia of Earth Sciences series. This encyclopedia updates and replaces the 1986 Encyclopedia of Climatology. The aim of the encyclopedia is to provide a basic understanding of aspects of climatology and information about recent advances in climatology. Over 200 articles are organised alphabetically and are cross referenced. A comprehensive index is also included.

557                  **The encyclopedia of world regional geology / edited by Rhodes W.  
FAI                  Fairbridge.**  
Stroudsburg, Pa. : Dowden, Hutchinson & Ross ; [New York] : [1975-  
Encyclopedia of earth sciences ; v. 8

This volume is part 1 of the encyclopedia and covers the Western Hemisphere, including Antarctica and Australia. Coverage includes continental reviews, regional analyses, country entries and overseas territories and isolated islands. Entries have been cross referenced and include a list of key literature sources. An author index is also available.

550.3                **McGraw-Hill concise encyclopedia of earth science.**  
MCGR                New York : McGraw-Hill, c2005.

900 articles covering geochemistry, geodesy, geology, geophysics, meteorology, oceanography and physical geography. Topics include: highest mountain peaks, classification of major igneous rocks, historic volcanic eruptions and types of volcanic structures; geologic column and scale of time and the world's estimated water supply.

363.7003            **McGraw-Hill concise encyclopedia of environmental science.**  
MCCR                New York : McGraw-Hill, 2005.

800 entries organised alphabetically covering all the principle areas of environmental science. Subjects covered include: agriculture, climatology, ecology, environmental engineering, epidemiology, forestry, geochemistry, geography and mapping, geology, microbiology, oceanography, plant pathology and zoology. Many entries are also illustrated. Includes cross references, appendices and an index.

*Baill*                **McGraw-Hill encyclopedia of science & technology**  
503                  New York : McGraw-Hill, c2002  
MACG.

7100 cross referenced articles covering 97 major subject areas of modern science and technology. Includes important developments and achievements. Articles include a definition and background material and, for some articles, bibliographies. Authors and contributors are included in an index which lists their affiliation etc. Analytical and topical indexes are included in volume 20.

*Online*             **The Oxford companion to the earth**  
*Resource*         Oxford Online Reference

1000 articles covering aspects of geology, including climatology, mineralogy, and oceanography as well as biographies of the key figures involved in geology.

*Baill*                **The Oxford companion to the earth / editors Paul L. Hancock and Brian J.**  
550.3               **Skinner**  
OXFO                Oxford ; New York : Oxford University Press, 2000.

This encyclopedia provides comprehensive coverage of all aspects of Earth Sciences. It is available online via *Oxford Reference Online* . A print copy is also held in the Baillieu Library and is available for loan.

*Online*             **The Oxford companion to the history of modern science**  
*Resource*         Oxford Online Reference

600 articles cover all disciplines, historical periods, concepts, and methodologies and philosophies in the history of modern science. Also includes 100 biographies of iconic historic figures, chosen for their contributions to science and the interest of their lives. International in scope.

553.7021           **The water encyclopedia / Frits van der Leeden, Fred L. Troise, David Keith**  
VAN.                **Todd.**  
                          Chelsea, Mich. : Lewis Publishers, c1990.

Over 600 tables and 100 illustrations covering: climates; hydrology; surface and ground water; water use; water quality; water management; water resources agencies; legislation; constants and conversion factors; and environmental problems - including pollution sources and pathways; contamination of surface water and ground water; use of pesticides and fertilizers, domestic, municipal and industrial waste disposal; water treatment and reuse; hazardous waste sites; offshore disposal; air pollution; acid rain; projected rise of sea levels due to the Greenhouse effect; waterborne diseases and the toxic effects of chemicals in drinking water.

## General Reference

- 423.1                    **Abbreviations dictionary / Dean Stahl, Karen Kerchelich ; originated by**  
STAH                    **Ralph De Sola.**  
Boca Raton, FL : CRC Press, 2001.

The *Abbreviations dictionary* contains abbreviations, acronyms, appellations, contractions, numbered abbreviations, and other short forms from computing, high technology, science and a broad range of other fields, pastimes, and groups.

- 550.17                    **Directory of geoscience departments.**  
DIRE                    Alexandria, Va. : American Geological Institute

A directory of colleges, universities, U.S State Geological Surveys, U.S. federal agencies and national laboratories, AGI and AGI member-society staffs. Currently hold the 41<sup>st</sup>, 2002-03 edition.

- 554.1025                **The geologist's directory 2002 : the leading guide to geoscience in the UK**  
GEOL                    **and Ireland.**  
Bath : Geological Society, c2002.

- 808.0665                **A guide to writing in the sciences / Andrea A. Gilpin, Patricia Patchet-**  
GILP                    **Golubev.**  
Gilpin, Andrea A.  
Toronto ; Buffalo [N.Y.] : University of Toronto Press, 2000.

This guide provides an explanation of the basic elements of scientific writing. It covers the various scientific genres including lab reports, research essays, scientific articles, poster presentations, proposals and exam essays.

- 808.027                    **Style manual for authors, editors and printers / revised by Snooks & Co.**  
STYL                    Milton, Qld. : John Wiley & Sons, 2002.

## Atmospheric Sciences

551.503            **Encyclopedia of atmospheric sciences / editor-in-chief, James R. Holton ;**  
ENCY               **editors, Judith A. Curry and John A. Pyle.**  
                         Amsterdam ; London : Academic, c2003.

A key reference work in the atmospheric sciences, the *Encyclopedia of atmospheric sciences* contains 330 contributions in 6 volumes covering all major aspects of atmospheric science and cognate subjects. Covers the physical, dynamical and chemical processes active in the atmosphere and the interactions of the atmosphere with the land, the oceans and the biosphere. Articles are organised alphabetically, cross referenced and indexed.

551.5               **The encyclopedia of atmospheric sciences and astrogeology, edited by**  
FAI                 **Rhodes W. Fairbridge.**  
                         New York, Reinhold Pub. Corp. [1967]  
                         Encyclopedia of earth sciences ; v. 2

Organised alphabetically, entries are cross referenced and include references for follow up.

## Climatology

551.60223      **Atlas of the surface heat balance of the continents : components and parameters estimated from climatological data**  
HENN.            Henning, Dieter.  
                    Berlin : G. Borntraeger, 1989.

Climatological data collected using the Albrecht, Budyko and the Penman methods.

*Online*            **A dictionary of weather**  
*Resource*        Oxford Online Reference  
                    Access via Supersearch: <http://tinyurl.com/yr292f>

1800 entries covering weather, forecasting, and climate terms as well as Key terms from the related fields of oceanography, hydrology, and climatology.

*ERC*              **A dictionary of weather / Storm Dunlop.**  
551.603          Dunlop, S (Storm).  
DUNL              Oxford : Oxford University Press, 2001.

The print copy of this title is held in the ERC Library Reference Collection but it is also available online via the library catalogue. This dictionary covers information relating to weather, climate & forecasting and related areas. Includes a list of weather records and key people in the development of meteorology.

551.503          **Elsevier's dictionary of climatology and meteorology : in English, French, Spanish, Italian, Portuguese, and German / compiled by J.L. de Lucca.**  
LUCC.            Amsterdam ; New York : Elsevier, 1994.

Contains over 3000 common terms from all fields of climatology and meteorology including: agrometeorology climatology hydrometeorology environmental meteorology aeronautical meteorology marine meteorology and radiometeorology. Definitions are also given in French, Spanish, Italian, Portuguese and German.

551.503          **Encyclopedia of climate and weather / Stephen H. Schneider, editor in chief.**  
ENCY.            New York : Oxford University Press, 1996.

Multidisciplinary encyclopedia covers both natural science topics and social science topics related to climate and weather. Areas covered include: physics, chemistry, astronomy, ecology, geography, geology, archaeology, oceanology, glaciology, agronomy, forestry, hydrology, health sciences, economics, history, political science and literature. Entries are cross referenced.

551.50321      **The Encyclopedia of climatology / edited by John E. Oliver, Rhodes W. Fairbridge.**  
ENCY.            New York : Van Nostrand Reinhold, c1987.  
                     Encyclopedia of earth sciences ; v. 11  
                     Access via Supersearch: <http://tinyurl.com/3yk2mo>

Entries are organised alphabetically, indexed and cross referenced. References have also been included at the end of each entry. Refer also to *The Encyclopedia of Atmospheric Sciences and Astrogeology* for standard terms not included in this volume.

551.6             **The encyclopedia of world climatology / John E. Oliver (ed.).**  
ENCY             Dordrecht : Springer, 2005.  
                     Encyclopedia of earth sciences.

Part of the Encyclopedia of Earth Sciences series. This encyclopedia updates and replaces the 1986 Encyclopedia of Climatology. The aim of the encyclopedia is to provide a basic understanding of aspects of climatology and information about recent advances in climatology. Over 200 articles are organised alphabetically and are cross referenced. A comprehensive index is also included.

## Earth Sciences

- 622.0994            **The Australian mines handbook**  
AUST                West Perth, W.A. : Louthean Publishing and Minmet Australia, 1996  
2003-04 Edition held

This handbook lists Australian companies and mines and is published annually. Company information includes: contact details; directors; shares on issue; major shareholders; subsidiaries; properties held by the company; and profits or losses for the previous financial years. Companies are listed alphabetically by name. Individual mines are organised according to the industry they are involved in. Industries listed include: bauxite, coal, cobalt, copper, diamonds, gold (divided into states and territories), iron ore, industrial minerals, lead-zinc-silver, manganese, mineral sands, nickel, oil shale, platinum, tantalite-tine, uranium. Information about the mines includes: status, location, owner, administration, geology, reserves production. Government departments and industry bodies are also listed in a separate section.

- 550                    **The Cambridge encyclopedia of earth sciences / editor in chief, David G. Smith.**  
CAMB.                New York, N.Y. : Crown Publisher/Cambridge University Press, 1981.

Key and classic reference source. Divided into six parts – 1. The Earth Sciences in Perspective – looks at the history of the earth and earth sciences. 2. Physics and Chemistry of the Earth – seismology, chemistry, mineralogy, geochemistry etc. 3. Crustal Processes and Evolution – volcanology, tectonics, sedimentation etc. 4. Surface Processes and Environments – atmosphere, climatology; oceanography, fossils etc. 5. Evaluation of Earth Resources and Hazards – remote sensing, economic geology etc. 6. Extraterrestrial Geology.

- 574.503            **The concise Oxford dictionary of ecology / edited by Michael Allaby.**  
CONC.                Oxford ; New York : Oxford University Press, 1994.

This dictionary aims to define terms and concepts relating to ecology, environmental pollution and conservation. Relevant terms from related disciplines are also included such as biogeography, animal behaviour, evolutionary theory, taxonomy, plant and animal physiology, climatology and meteorology, oceanography, hydrology, pedology, glaciology, and geomorphology. Brief biographical entries are included for people who have made significant contributions to ecology. Cross references are included.

- Online*                **A dictionary of earth sciences**  
*Resource*            Oxford Online Reference  
Access via Supersearch: <http://tinyurl.com/29zqzf>

Includes 6000 terms on subjects such as climatology, economic geology, geochemistry, oceanography, palaeontology, petrology, and volcanology.

- 550.3                **A dictionary of earth sciences.**

DICT. Oxford ; New York : Oxford University Press, 1999.

Authoritative source for all areas of earth sciences. Coverage includes: climatology, economic geology, geochemistry, oceanography, palaeontology, petrology, and volcanology. Also available online via Supersearch.

550.3  
MICH **Dictionary of earth sciences : English-French, French-English = Dictionnaire des sciences de la terre : anglais-francais, francais-anglais / J.-P. Michel, R.W. Fairbridge.**  
Chichester ; New York : Wiley ; Paris : Masson, 1992.  
2nd ed., rev. and expanded.

*Online Resource* **A dictionary of ecology**  
Oxford Online Reference  
Access via Supersearch: <http://tinyurl.com/yr365e>

The current edition is the 3<sup>rd</sup> edition and contains 5200 entries making it an authoritative source for ecology. Subjects covered biogeography, genetics, soil science, geomorphology, atmospheric science, and oceanography, plant and animal physiology, animal behaviour, pollution, conservation, habitat management, evolution, environmental pollution, climatology and meteorology.

631.403  
LOZE **Dictionary of soil science / Jean Lozet, Clement Mathieu ; foreword by Marcel Jamagne.**  
Rotterdam : Balkema, 1991.

Covers the physical, chemical and biological properties of soils and their evolution and use. Also includes related terms in mineralogy, agricultural hydrology and surface hydrology.

503.21  
EMIL **Dictionary of the physical sciences : terms, formulas, data / Cesare Emiliani.**  
New York : Oxford University Press, c1987.

Covers physics (classical, relative, quantum, particle, high-energy); chemistry (inorganic, organic, physical); geology, geophysics, oceanography, meteorology, paleontology and related areas of molecular, genetic and evolutionary biology; and cosmology, astronomy, astrophysics, and the genesis and evolution of the universe. Entries include definitions, explanations, formulas and other data.

333.7  
ENCY **Encyclopedia of environmental science / edited by David E. Alexander and Rhodes W. Fairbridge.**  
Dordrecht ; London : Kluwer Academic, c1999.  
Access via Supersearch: <http://tinyurl.com/2uttkq>

A multidisciplinary approach to the many fields of interest that comprise the environment. Includes information on the atmosphere, hydrosphere, biosphere and geosphere. The encyclopedia covers basic information as it relates to the environmental sciences as well as the leading theories and important debates in the area. Also included are assessments of future prospects for the environment with the increase in population, pollution and the transformation of land, air, water and vegetational systems. Entries are referenced and cross referenced.

551.14                    **The encyclopedia of geochemistry and environmental sciences /edited by**  
FAI                        **Rhodes W. Fairbridge.**  
New York : Van Nostrand Reinhold, 1972.  
Encyclopedia of earth sciences ; v. 4A

Covers geochemistry - the chemistry of the planet earth and its compositional evolution. Coverage includes all elements in nature; important chemical cycles and processes; major mineral groups and species; and summaries of valuable economic ore deposits. The preface includes information about the history and nature of geochemistry. References are included with each entry and entries are cross referenced.

551.5                    **The encyclopedia of geomorphology / edited by Rhodes W. Fairbridge.**  
FAI                        New York, Reinhold Book Corp. [c1968]  
Encyclopedia of earth sciences ; v. 3  
Access via Supersearch: <http://tinyurl.com/23raeg>

551.4103                **Encyclopedia of geomorphology / edited by A.S. Goudie.**  
ENCY                    London ; New York : Routledge, 2004.

Major new reference work on geomorphology - the study of the history and nature of the Earth's surface. A comprehensive guide including 700 entries and global coverage. Topics cover the major types of geomorphological processes as well as specific landforms and the major developments in areas such as tectonics, climate change, modelling, remote sensing and process measurement.

559.92                    **Encyclopedia of planetary sciences / edited by James H. Shirley and Rhodes**  
ENCY                    **W. Fairbridge.**  
Dordrecht ; Boston : Kluwer Academic Publishers, 2000.

Comprehensive coverage of the planetary sciences - the nature and evolution of the planets, satellites and smaller bodies of the solar system. Articles are arranged in several categories including: asteroids, astronomy, atmosphere, biographies, celestial mechanics and gravitation, comets, geology and geophysics, magnetic fields and the interplanetary environment, meteorites, missions to planets and the moon, planets, rings, satellites, the sun and solar physics and techniques. All topics are arranged alphabetically and are cross referenced where appropriate. References to cited works are also included to assist in locating more detailed information. The accompanying CD-ROM contains over 200 images from the archives of NASA's National Space Science Data Center.

551.03                    **The Encyclopedia of the solid earth sciences / editor-in-chief, Philip Kearey.**  
ENCY                    Oxford ; Melbourne : Blackwell Scientific, 1993.

Over 2700 entries covering all of the sub-disciplines of earth sciences. Entries are organised alphabetically, cross referenced and indexed. Synonyms are also included. Longer entries also include key references.

551.6072                **IGBP Directory**  
INTE                    International Geosphere-Biosphere Program "Global Changes"  
Stockholm, Sweden : International Geosphere-Biosphere Programme,

Directory for the International Geosphere-Biosphere Programme. Lists the committee members, projects officers, international partners, co-sponsors, national committee members. Current year only held.

**550.3**                    **McGraw-Hill concise encyclopedia of earth science.**  
MCGR                    New York : McGraw-Hill, c2005.

900 articles covering geochemistry, geodesy, geology, geophysics, meteorology, oceanography and physical geography. Topics include: highest mountain peaks, classification of major igneous rocks, historic volcanic eruptions and types of volcanic structures; geologic column and scale of time and the world's estimated water supply.

550.3                    **McGraw-Hill dictionary of earth sciences / Sybil P. Parker, editor in chief.**  
MCGR.                    New York : McGraw-Hill, c1997.

Defines over 10,000 terms from earth sciences and related fields. Multidisciplinary approach covering 9 subjects including climatology, geochemistry, geodesy, geography, geology, geophysics, hydrology, meteorology and oceanography. Definitions are identified by the subject in which they are primarily used. Also includes synonyms, acronyms and abbreviations. All definitions have been drawn from the *McGraw Hill Dictionary of Scientific and Technical Terms* (5<sup>th</sup> edition, 1994).

025.49551              **Multilingual thesaurus of geosciences / edited by G.N. Rassam, J. MULT.**  
MULT.                    **Gravesteijn, R. Potenza**  
New York : Pergamon Press, c1988.

5,000 key terms expressed in English, French, German, Italian, Russian and Spanish. Terms are classed in 36 groups of which 20 match the major subdivisions of geosciences, 11 match the classification domains e.g. stratigraphy, rock names elements etc., and the remaining 5 describe concepts common to all subdivisions, properties, methods etc. The majority of the main entries came from the American Geological Institution's Glossary of Geology. Also includes 6 language indexes.

**Online**                    **The Oxford companion to the earth**  
**Resource**                Oxford Online Reference

1000 articles covering aspects of geology, including climatology, mineralogy, and oceanography as well as biographies of the key figures involved in geology.

**Baill**                    **The Oxford companion to the earth/ editors Paul L. Hancock and Brian J.**  
550.3                    **Skinner**  
OXFO                    Oxford ; New York : Oxford University Press, 2000.

This encyclopedia provides comprehensive coverage of all aspects of Earth Sciences. It is available online via *Oxford Reference Online* . A print copy is also held in the Baillieu Library and is available for loan.

551.9                    **Treatise on geochemistry / executive editors, H.D. Holland and K.K.**  
TREA                    **Turekian.**  
                              Oxford, UK ; San Diego, CA, USA : Elsevier Pergamon, 2004 [i.e.2003]

Comprehensive reference work dealing with all the major parts of geochemistry. It is made up of 10 volumes as follows:

- v. 1. Meteorites, comets, and planets / volume editor, A.M.Davis
- v. 2. The mantle and core / volume editor, R.W. Carlson
- v. 3. The crust / volume editor, R.L. Rudnick
- v. 4. The atmosphere / volume editor, R.F. Keeling
- v. 5. Surface and ground water, weathering, and soils / volume editor, J.I. Drever
- v. 6. The oceans and marine geochemistry / volume editor, H. Elderfield
- v. 7. Sediments, diagenesis, and sedimentary rocks / volume editor, F.T. Mackenzie
- v. 8. Biogeochemistry / volume editor, W.H. Schlesinger
- v. 9. Environmental geochemistry / volume editor, B.S. Lollar
- v. 10. Indexes.

## Geology

912.1333            **Atlas of Australian resources.**  
70994                Canberra : Division of National Mapping, 1980-1990  
ATLA                 3<sup>rd</sup> series

Comprised of 6 volumes as follows: v. 1. Soils and land use -- v. 2. Population -- v. 3. Agriculture -  
- v. 4. Climate -- v. 5. Geology and minerals -- v. 6. Vegetation. Principal maps 1:5,000,000 or  
1:10,000,000; supplementary maps at various scales.

912.945            **Atlas of Victoria / edited by J.S. Duncan.**  
ATLA                Melbourne : Victorian Government Printing Office on behalf of the Government  
of Victoria, 1982.

Includes chapters on: relief, landsat imagery, geology, earthquakes, physiography, climate, water  
resources, groundwater resources, land types, bushfires, vegetation, wildlife, prehistory, history,  
population, Melbourne, provincial cities, employment, manufacturing, rural production, vermin,  
weeds, minerals, oil and natural gas, energy, the coast, transport, the media, education, hospitals,  
community welfare, sport and recreation, parks and reserves, the national estate, electoral  
geography, regions, topography, and a gazetteer. Maps are also accompanied by explanatory text  
and photographs.

550.3                **Collins dictionary geology / Dorothy Farris Lapidus ; scientific adviser:**  
LAPI                **Donald R. Coates ; consultant editor: Isobel Winstanley.**  
Glasgow : HarperCollins, 2003.

*Online*                **A dictionary of earth sciences**  
*Resource*            Oxford Online Reference  
Access via Supersearch: <http://tinyurl.com/29zqzf>

Includes 6000 terms on subjects such as climatology, economic geology, geochemistry,  
oceanography, palaeontology, petrology, and volcanology.

550.3                **Dictionary of geological terms / Robert L. Bates and Julia A Jackson, editors;**  
DICT                **prepared under the direction of the American Geological Institute.**  
Garden City, N.Y. : Anchor Press, 1984.

550.7441           **Directory of British geological museums / compiled and edited by John R.**  
DIRE                **Nudds on behalf of the Geological Curators' Group.**  
London : Geological Society on behalf of the Geological Curator's Group ;  
Tulsa, Okla. : AAPG Bookstore [distributor], 1994.

Details collections, geological services and facilities, as well as location and opening hours.

624.1510321      **The Encyclopedia of applied geology / edited by Charles W. Finkl, Jr.**  
ENCY              New York : Van Nostrand Reinhold, c1984.  
                      Encyclopedia of earth sciences ; v. 13  
                      Access via Supersearch: <http://tinyurl.com/268ejn>

Applied geology is concerned with the application of aspects of geology to other areas such as economic, engineering, water-supply, and environmental problems. The encyclopedia includes topics mainly related to engineering geology, but also covering landscapes, earth materials and the management of geological processes. Also includes a list of references dealing with these topics such as abstracts and abstracting services, databases, periodicals, texts and reference works.

551.203            **Encyclopedia of earthquakes and volcanoes / David Ritchie and Alexander E.**  
RITC               **Gates.**  
                      New York : Checkmark Books, c2001.

Covers earthquakes and volcanoes and their impact on human existence. Includes photographs & maps including plate tectonic scenarios and diagrams showing the processes of formation. Description entries, maps, photographs and diagrams are all cross referenced.

551.03             **Encyclopedia of European and Asian regional geology / edited by Eldridge**  
ENCY               **M. Moores and Rhodes W. Fairbridge.**  
                      London : Chapman & Hall, c1997.  
                      Access via Supersearch: <http://tinyurl.com/3xpnwl>

Provides a current overview to the general geology of Europe and Asia (excluding the Arab countries and Israel). Entries are organised alphabetically by country and include information on the stratigraphy, structure, tectonics and the natural resources of each country as well as the history of geological exploration for that country. Unique issues for each country are also covered. International subjects such as Europe, Asia, the Alps, Caucasus, Himalayan and Tien Shan mountains are also included in additional articles. Entries include representative figures illustrating main geologic features and a selected bibliography of relevant publications.

*Online*             **Encyclopedia of Field and General Geology**  
*Resource*         Earth Sciences Encyclopedia Online  
                      Access via Supersearch: <http://tinyurl.com/ypwt5c>

Provides an introduction to general field work through selected topics that illustrate specific techniques and methodologies such as aspects of exploration surveys, geotechnical engineering, environmental management, field techniques, mapping, prospecting, and mining.

551.903            **Encyclopedia of geochemistry / edited by C.P. Marshall and R.W. Fairbridge.**  
ENCY               Dordrecht ; Boston : Kluwer Academic Publishers, 1999.  
                      Access via Supersearch: <http://tinyurl.com/24g6jp>

A comprehensive encyclopedia for the subject of geochemistry. Covers 345 topics relating to different aspects of geochemistry including organics, trace elements, isotopes, high and low temperature geochemistry and ore deposits. Entries for the instruments used in geochemical techniques are also included as are the chemical elements with common mineralogical, petrological and sedimentological depictions. Each entry is cross referenced and includes a reference list for further reading. The encyclopedia is arranged alphabetically with comprehensive subject and citation indexes.

551.03  
ENCY                    **Encyclopedia of geology / edited by Richard C. Selley, L. Robin M. Cocks, Ian R. Plimer.**  
Amsterdam ; London : Elsevier Academic, 2005.

The *Encyclopedia of Geology* is a major new reference work covering all aspects of geology. It includes 350 articles each dealing with a separate aspect of geology such as: earth history, earth materials, surface processes, regional geology, economic geology, engineering geology, petroleum geology, geochemical and mineral exploration, and the history of geology. Entries are organised alphabetically and are also cross-referenced and include further reading lists.

552.503  
ENCY                    **Encyclopedia of sediments & sedimentary rocks / edited by Gerard V. Middleton ; with associate editors Michael J. Church ...[et al.].**  
Dordrecht ; London : Kluwer Academic Publishers, c2003.

Revision of Encyclopedia of Sedimentology (1978).

551.80321  
ENCY                    **The Encyclopedia of structural geology and plate tectonics / edited by Carl K. Seyfert.**  
New York : Van Nostrand Reinhold, c1987  
Access via Supersearch: <http://tinyurl.com/2zkjqp>

Covers structural geology and plate tectonics. Entries are organised alphabetically and cross referenced. A list of main entries is provided in the introduction and an index is included to locate sub topics.

557  
FAI                        **The encyclopedia of world regional geology / edited by Rhodes W. Fairbridge.**  
Stroudsburg, Pa. : Dowden, Hutchinson & Ross ; [New York] : [1975-  
Encyclopedia of earth sciences ; v. 8

This volume is part 1 of the encyclopedia and covers the Western Hemisphere, including Antarctica and Australia. Coverage includes continental reviews, regional analyses, country entries and overseas territories and isolate islands. Entries have been cross referenced and include a list of key literature sources. An author index is also available.

622.1503  
SHER                    **Encyclopedic dictionary of exploration geophysics / Robert E. Sheriff.**  
Sheriff, Robert E.

Tulsa, OK : Society of Exploration Geophysicists, c1991.

555.10223  
HSU.                   **Geologic atlas of China : an application of the tectonic facies concept to the geology of China**  
Amsterdam ; New York : Elsevier, 1999.

Includes an introductory section on the origins of mountains and tectonic-facies mapping. The atlas is then divided into regions of China – the Tibetan Plateau; northwest and north China; central China; south China and pacific China. Also includes a phanerozoic history of China.

554  
ZIEG.                   **Geological atlas of Western and Central Europe / by Peter A. Ziegler.**  
The Hague : Shell Internationale Petroleum Maatschappij B.V., c1982.

Provides an overview of the tectonic and stratigraphic framework of Western and Central Europe, and a summary of evolution in that area since later Silurian times.

554.1025  
GEOL                   **The geologist's directory 2002 : the leading guide to geoscience in the UK and Ireland.**  
Bath : Geological Society, c2002.

550.922  
SARJ :                   **Geologists and the history of geology : an international bibliography from the origins to 1978 / by William A. S. Sarjeant.**  
v.1-5                   New York : Arno Press, 1980.

550.922  
SARJ :                   **Geologists and the history of geology : an international bibliography from the origins to 1978. Supplement, 1979-1984 and additions / by William A.S. Sarjeant.**  
V.1. /V.2.           Malabar, Fla., U.S.A. : R.E. Krieger Pub. Co., 1987.

550.922  
SARJ.                   **Geologists and the history of geology : an international bibliography from the origins to 1978 : supplement 2, 1985-1993, and additions / by William A.S. Sarjeant.**  
Malabar, Fla. : Krieger Pub. Co., 1996.

Originally published in 1978, this bibliography on the history of geology has continued to be updated via supplements in 1987 and 1996. Covers the origins and growth of geology; societies, associations and collections associated with geology; history of the petroleum industry and the biographies of geologists within those areas. Includes an author index in volume 5 of the original publication. Coverage includes all books, journals and articles published in languages using the Latin alphabet. The bibliography excludes languages such as Russian, Chinese, Japanese and Arabic etc. Coverage of Australian material may be as high as 85% of all publications on the history of geology. Entries are organised alphabetically.

For the original publication, the volumes are organised as follows:

- *Volume 1* – General introduction; general works; historical accounts of societies, museums and other institutions concerned with geology; accounts of events significant in the history of geology.
- *Volume 2* – Individual geologists A-K.
- *Volume 3* – Individual geologists L-Z; prospectors, diviners and mining engineers.
- *Volume 4* – Index of geologists by nationality and country; index of geologists by speciality.
- *Volume 5* – Index of authors, editors and translators; computerised bibliography production with cross reference indices.

For the first supplement, the volumes are organised as follows:

- *Volume 1* – General introduction; general works; historical accounts of societies, museums and other institutions concerned with geology; histories of the petroleum industries; accounts of events significant in the history of geology; individual geologists; prospectors, diviners and mining engineers.
- *Volume 2* – Index of geologists by nationality and country; index of geologists by speciality; Index of authors, editors and translators; index of women geologists.

For the second supplement, the volumes are organised as follows:

- *Volume 1* – Preface and introduction; general works; historical accounts of societies, museums and other institutions concerned with geology; accounts of events significant in the history of geology; individual geologists A-K.
- *Volume 2* – Individual geologists L-Z; prospectors, diviners and mining engineers; index of geologists by nationality and country; index of geologists by speciality; index of authors, editors and translators; index of women geologists.

550.3                    **Glossary of geology / Julia A. Jackson, Editor.**  
GLOS                    Alexandria, Va. : American Geological Institute, 1997.

Definitions also include origins of terms and the date terms were first used; the meaning of common geoscientific abbreviations and acronyms; meaning of certain prefixes; the preferred term between two or more synonyms and the difference between look alike pairs. Expanded coverage is given to fields such as carbonate sedimentology, environmental geology and geophysics, GIS, GPS, hydrology and hydraulics, marine and coastal geology, organic geochemistry, palaeoecology, seismology, stratigraphic nomenclature, speleology and karst, and structural geology and tectonics.

551.9                    **Handbook of geochemistry. Executive editor: K. H. Wedepohl. Editorial**  
HAND.                    **board: C. W. Correns [and others].**  
                                 Berlin, Heidelberg, New York, Springer, 1969-1978.

Includes chapters on the discovery of the chemical elements; the history of geochemistry & definitions of geochemistry; crystal chemistry; thermodynamics used in geochemistry; meteorite composition; cosmic abundances; geophysical aspects of structure and composition of the earth and the Earth's crust; composition and abundance of common igneous rocks; composition and abundance of common sedimentary rocks; composition and abundance of common metamorphic rock types; the oceans, streams and atmosphere. Includes separate author and subject indexes.

552.1                    **Igneous rocks : a classification and glossary of terms : recommendations of**

INGE                    **the International Union of Geological Sciences Subcommittee on the Systematics of Igneous Rocks.**  
Cambridge, England : Cambridge University Press, 2004.

551.70012            **International stratigraphic guide : a guide to stratigraphic classification, terminology, and procedure**  
INTE.                    Trondheim, Norway : International Union of Geological Sciences ; Boulder, Colo. : Geological Society of America, c1994.

Covers various fields of stratigraphy including the stratigraphic treatment of igneous and metamorphic rock bodies. Included are chapters on principles of stratigraphic classification; definitions and procedures; stratotypes and type localities; lithostratigraphic units; unconformity-bounded units; biostratigraphic units; magnetostratigraphic polarity units; chronostratigraphic units; relation between different kinds of stratigraphic units; glossary of stratigraphic terms; national or regional stratigraphic codes; bibliography of stratigraphic classification, terminology and procedure.

631.44                **Munsell soil color charts.**  
MUN                    New Windsor, N.Y. : Gretag Macbeth : Munsell Color, 2000.

9 of Munsell's colour charts that relate specifically to soils. Includes 332 different standard colour systematically arranged by Munsell notations. Arrangements are by the 3 dimensions of the Munsell system – hue, value and chroma and are combined to describe all colours. Please ask at the Library Desk to use this item.

*Online*                **The Oxford companion to the earth**  
*Resource*             Oxford Online Reference

1000 articles covering aspects of geology, including climatology, mineralogy, and oceanography as well as biographies of the key figures involved in geology.

551.4103            **The regolith glossary : surficial geology, soils and landscape /Richard A. Eggleton.**  
REGO                    Floreat, W.A. : Cooperative Research Centre for Landscape Evolution and Mineral Exploration, 2001.

Contains terms commonly used in regolith sciences. The glossary clarifies meanings of words and provides consistency and uniformity in the use of regolith science terminology and how it has been used in regolith literature. Also includes photographs and diagrams.

552                    **Rock-color chart : with genuine Munsell color chips / prepared by the Rock-Color Chart Committee.**  
ROCK                    Boulder, Colo. : Geological Society of America, 1995.

The rock chart is used in describing rock-forming minerals, especially medium-to fine-grained rocks. It can also be used for coarse-grained rocks. Colours used in the colour-chart are plotted on Munsell's colour charts. Can be used for both wet and dry specimens. Please ask at the Library desk to use this item.

## Hydrology

551.4803            **Elsevier's dictionary of environmental hydrogeology : in English, French, and**  
PFAN                **German / compiled by Hans-Olaf Pfannkuch.**  
                         Amsterdam ; New York : Elsevier, 1990.

*Elsevier's dictionary of environmental hydrogeology* covers groundwater and groundwater contamination, hydrogeology, water resources and related areas. It is organised alphabetically in English with separate sections for French and German.

**Online**            **Encyclopedia of hydrological sciences**  
**Resource**        Wiley

200 articles on the key aspects of hydrological sciences.

551.4803            **Encyclopedia of hydrology and water resources / edited by Reginald W.**  
ENCY.               **Hersch and Rhodes W. Fairbridge.**  
                         Dordrecht ; Boston : Kluwer Academic, 1998.  
                         Encyclopedia of earth sciences series

Topics covered in this encyclopedia are numerous and are linked to either hydrology or water resources. Entries are organised alphabetically, cross referenced and indexed. Also includes a list of selected international journals in hydrology and water resources.

551.4803            **Glossary of hydrology / William E. Wilson and John E. Moore, editors.**  
GLOS                Alexandria, Va. : American Geological Institute, 1998.

Published by the American Geological Institute. Provides the current or preferred meaning of a term and reflects usage in North American literature. Some definitions also include the original usage or historical development of a term. Obsolete terms have been included if they are still valuable for using older literature. Foreign language terms are only included if they have been used in English. Terms are cross referenced and multiple definitions are included where appropriate. Terms that have relevance to more than one subject area are also indicated.

551.4803            **International glossary of hydrology**  
INTE.                *Paris, France : United Nations Educational, Scientific and Cultural Organization ;*  
                         *Gen{225}eve, Suisse : World Meteorological Organization, 1992.*

International glossary of hydrology includes hydrological terms in English, French, Russian and Spanish, their definitions and the Universal Decimal Classification (UDC) for hydrology. Alphabetical indexes for each language are also included. Definitions given are internationally accepted. Sources of the definitions are also included.

553.7021            **The water encyclopedia / Frits van der Leeden, Fred L. Troise, David Keith**  
VAN.                **Todd.**  
                         Chelsea, Mich. : Lewis Publishers, c1990.

Over 600 tables and 100 illustrations covering: climates; hydrology; surface and ground water; water use; water quality; water management; water resources agencies; legislation; constants and conversion factors; and environmental problems - including pollution sources and pathways; contamination of surface water and ground water; use of pesticides and fertilizers, domestic, municipal and industrial waste disposal; water treatment and reuse; hazardous waste sites; offshore disposal; air pollution; acid rain; projected rise of sea levels due to the Greenhouse effect; waterborne diseases and the toxic effects of chemicals in drinking water.

## Meteorology

**Online Resource**      **A dictionary of weather**  
Oxford Online Reference  
Access via Supersearch: <http://tinyurl.com/yr292f>

1800 entries covering weather, forecasting, and climate terms as well as Key terms from the related fields of oceanography, hydrology, and climatology.

**ERC**                      **A dictionary of weather / Storm Dunlop.**  
551.603                  Dunlop, S (Storm).  
DUNL                      Oxford : Oxford University Press, 2001.

The print copy of this title is held in the ERC Library Reference Collection but it is also available online via the library catalogue. This dictionary covers information relating to weather, climate & forecasting and related areas. Includes a list of weather records and key people in the development of meteorology.

551.503                  **Elsevier's dictionary of climatology and meteorology : in English, French,**  
LUCC.                      **Spanish, Italian, Portuguese, and German / compiled by J.L. de Lucca.**  
                                    Amsterdam ; New York : Elsevier, 1994.

Contains over 3000 common terms from all fields of climatology and meteorology including: agrometeorology, climatology, hydrometeorology, environmental meteorology, aeronautical meteorology, marine meteorology and radiometeorology. Definitions are also given in French, Spanish, Italian, Portuguese and German.

551.5                      **Glossary of meteorology / Todd S. Glickman, managing editor.**  
GLOS.                      Boston : American Meteorological Society, 2000.

Covers all fields of meteorology but related subjects are only included if they directly impact on meteorology. Also includes slang, folk terms, acronyms, mathematical and statistical terms, and abbreviations. Entries are cross referenced. Some entries also include a bibliography of references.

016.5515.                **International bibliography of meteorology : from the beginning of printing**  
INTE                      **to 1889 : four volumes in one: temperature, moisture, winds, storms / edited**  
                                    **by James Rodger Fleming & Roy E. Goodman ; with a foreword by E. Philip**  
                                    **Krider ; historical introduction by James Rodger Fleming.**  
                                    Upland, Pa. : Diane Pub. Co., 1994.

Revised edition of the Bibliography of Meteorology originally published in 1872. It is the major bibliographic resource on atmospheric sciences prior to Meteorological and Geostrophysical Abstracts which began in 1950. The new edition contains over 16,000 citations to meteorological and environmental literature published before 1889. Only one third of the entries are in English and 10% of entries are earlier than 1750. Includes all the errata, additions, corrections and

supplements of the original four volumes. It has been divided into subject headings and subheadings and includes an author index at the end of each volume. Citations include author, title, format, place and date of publication. Maps, charts and plates are also included. Periodical references include abbreviated title, place of publication, volume number, year of publication and page numbers.

Topics covered include: agriculture, forestry, exploration, geography, hydrology, oceanography, geology and geophysics, maritime history, environmental history, literature and folklore, temperature and rainfall records, descriptions of hurricanes, snowstorms, shipwrecks and acid rain events.

551.50212            **International meteorological tables**  
WORL                Geneva, 1966-

Published by the World Meteorological Organisation. Contains conversion tables, tables of dynamics of the atmosphere, tables of atmospheric statics, tables of atmospheric thermodynamics and astronomical and geodetical tables.

551.503             **Meteorological glossary / Meteorological Office ; [edited by R.P.W. Lewis]**  
GREA                London : HMSO, 1991.

551.50212           **Smithsonian meteorological tables.**  
SMIT                Smithsonian Institution.  
Ann Arbor, Mich. : University Microfilms International, [19--]

Includes conversion tables; wind and dynamical tables; barometric and hypsometric tables; geopotential and aerological tables; standard atmosphere and altimetry tables; thermodynamic tables; hygrometric and psychrometric tables; tables of miscellaneous physical properties of air and air-borne particles; tables of miscellaneous properties of water substance and soils; radiation and visibility tables; geodetic and astronomical tables.

## Mineralogy

- 549  
DANA.                   **Dana's new mineralogy : the system of mineralogy of James Dwight Dana and Edward Salisbury Dana.**  
Dana, James Dwight, 1813-1895.  
New York : Wiley, c1997.

Updates *Dana's System of Mineralogy*. Describes, catalogues and classifies all known and recognized minerals reported in literature up to the end of 1995. Includes the DANA classification number; name; chemical formula; name derivation; groups, dimorphs and polymorphs, synonyms and varieties, and polytypes, crystallography, physical properties, composition and phase relationships, occurrence, and localities.

- 549.0321               **The Encyclopedia of mineralogy / edited by Keith Frye.**  
ENCY                   Stroudsburg, Pa. : Hutchinson Ross Pub. Co., c1981.  
Encyclopedia of earth sciences ; v. 4B  
Access via Supersearch: <http://tinyurl.com/2b5dav>

The encyclopedia of mineralogy includes articles on mineralogical interests, activities, methods and a mineral glossary. Also includes 2 indexes to assist in locating information. The mineral glossary provides almost 3000 entries covering chemical composition, structural group and crystal system. 530 key minerals, determined by abundance, distribution and economic importance, are given more detailed entries. Entries also included references to further and more detailed information.

- 549.032               **Glossary of mineral species 1995 / Michael Fleischer, Joseph A. Mandarino.**  
FLEI.                   Tucson, Ariz. : Mineralogical Record, 1995

Alphabetical summary of mineral names for quick and easy reference. Emphasis is on the chemical composition, polymorphism, and relationships to other minerals. Each entry includes the chemical formula, the crystal system, the colour and the relationship to other minerals. Many entries also include references to either the first description, an abstract of the first descriptions or a recent and significant publication.

- 552                   **Practical handbook of physical properties of rocks and minerals / edited by Robert S. Carmichael.**  
PRAC                   Boca Raton, Fla. : CRC Press, c1989.

The handbook contains several sections covering a number of different areas including mineral composition of rocks; densities of rocks and minerals; inelastic properties of rocks and minerals : strength and rheology; magnetic properties of minerals and rocks; electrical properties; seismic velocities; seismic attenuation; radioactivity properties of minerals and rocks; spectroscopic properties of rocks and minerals; engineering properties of rock. Each section includes references. A full index is also included.

## Oceanography

551.458            **Encyclopedia of coastal science / edited by Maurice L. Schwartz.**  
ENCY            Dordrecht ; [London] : Springer, c2005  
                    Encyclopedia of earth sciences series  
                    Access via Supersearch: <http://tinyurl.com/38bzlb>

Comprehensive and interdisciplinary, includes 245 contributions covering geomorphology, ecology, engineering, technology, oceanography and human activities as they relate to coasts. Entries are organised alphabetically, indexed and cross referenced. References have also been included at the end of each entry. This encyclopedia is part of the Encyclopedia of earth sciences series and updates and replaces *The Encyclopedia of beaches and coastal environments* (1982).

551.46003        **Encyclopedia of ocean sciences / editor-in-chief, John H. Steele ; editors,**  
ENCY            **Steve A. Thorpe, Karl K. Turekian.**  
                    San Diego : Academic Press, c2001.

6 volume major reference work from Academic Press. Includes over 350 articles on all aspects of ocean sciences from the latest information and research to the classic scientific theories. Contributors to the encyclopedia include many of the leading scientists in the area. Cross referencing, reading lists and detailed indexes are available to assist the user in finding material. Volume 1 also includes a *Guide to Use of the Encyclopedia*.

551.46            **The encyclopedia of oceanography, edited by Rhodes W. Fairbridge.**  
FAI            New York, Reinhold Pub. Co. [1966]  
                    Encyclopedia of earth sciences ; v. 1

Entries are organised alphabetically, cross referenced and include a reference list for further information.

## Palaeontology

573.20321      **Encyclopedia of human evolution and prehistory / edited by Ian Tattersall, Eric Delson and John Van Couvering.**  
ENCY              New York : Garland Publishing, c1988.

Covers human evolution including: systematics, evolutionary theory, genetics, primatology, primate paleontology and paleolithic archaeology. Entries are organised alphabetical and about half have been cross referenced. Subjects are also given and are included in an index. Major subject areas include: evolutionary biology, morphology, primate taxa, human fossils – geology, paleontology, stratigraphy, chronology, fossil and archaeological localities by continent and age; archaeology, archaeological sites and industries by age and biological entries.

560.3              **The Encyclopedia of paleontology / edited by Rhodes W. Fairbridge, David Jablonski.**  
ENCY.              Stroudsburg, Pa. : Dowden, Hutchinson & Ross ; [New York] : distributed by Academic Press, c1979  
Encyclopedia of earth sciences ; v. 7  
Access via Supersearch: <http://tinyurl.com/2a5j3y>

This encyclopedia covers all aspects of paleontology and related disciplines such as geochemistry, population biology, histology, botany, anthropology, and geophysics. Entries are organised alphabetically and cross referenced. A subject index is also included. References to key literary sources are included with entries.

560.943              **The Geological Survey of Queensland fossil collection : catalogue of type, figured, and cited fossils / by Susan M. Parfrey.**  
PARF              Brisbane, Qld. : Dept. of Mines and Energy, Development Division, 1996.

Outlines the macro-fossils held in the Geological Survey of Queensland Fossil Collection. Includes plant, invertebrate and vertebrate fossils that have been described, figured or mentioned in publications published between 1880-1995. Specimens are organised or alphabetically within their taxonomic groups. The species lists are sorted numerically by fossil registration number. Geographic localities are also included in some listings.

## Science - General

574.503            **The concise Oxford dictionary of ecology / edited by Michael Allaby.**  
CONC.            Oxford ; New York : Oxford University Press, 1994.

This dictionary aims to define terms and concepts relating to ecology, environmental pollution and conservation. Relevant terms from related disciplines are also included such as biogeography, animal behaviour, evolutionary theory, taxonomy, plant and animal physiology, climatology and meteorology, oceanography, hydrology, pedology, glaciology, and geomorphology. Brief biographical entries are included for people who have made significant contributions to ecology. Cross references are included.

*Online*            **A dictionary of chemistry**  
*Resource*        Oxford Online Reference  
Access via Supersearch: <http://tinyurl.com/2am958>

4200 entries on common chemical terms. Covers areas such as physical chemistry, biochemistry, laboratory techniques, chemical engineering, and environmental matters. Also includes a full alphabetical table of elements and their properties.

*Online*            **A dictionary of ecology**  
*Resource*        Oxford Online Reference  
Access via Supersearch: <http://tinyurl.com/yr365e>

The current edition is the 3<sup>rd</sup> edition and contains 5200 entries making it an authoritative source for ecology. Subjects covered biogeography, genetics, soil science, geomorphology, atmospheric science, and oceanography, plant and animal physiology, animal behaviour, pollution, conservation, habitat management, evolution, environmental pollution, climatology and meteorology.

*Online*            **A dictionary of geography**  
*Resource*        Oxford Online Reference  
Access via Supersearch: <http://tinyurl.com/2a348t>

6000 entries giving comprehensive and authoritative coverage of all aspects of human and physical geography. Subjects include: cartography, surveying, meteorology, climatology, biogeography, ecology, geology, geomorphology, population, migration, agriculture, industry, transport, and development. Also includes key economic and population statistics.

*Online*            **A dictionary of physics**  
*Resource*        Oxford Online Reference  
Access via Supersearch: <http://tinyurl.com/257le7>

The 5<sup>th</sup> edition includes 3,700 entries on common terms and concepts used in physics. Covers subjects such as astronomy, astrophysics, and physical chemistry. Also included are in-depth analyses of key topics, biographies of important scientists, and chronologies of major discoveries.

**Online**                    **A dictionary of scientists**  
**Resource**                Oxford Online Reference  
Access via Supersearch: <http://tinyurl.com/29srz4>

This is a biographical dictionary of scientists, and with 1600 entries covering 2,500 years, it is considered to be extremely comprehensive and authoritative. It covers key figures in all areas of science, such as physics, astronomy, medicine, ecology, mathematics and technology. Includes coverage of all Nobel Laureates in physics, chemistry, physiology, and medicine.

631.403                    **Dictionary of soil science / Jean Lozet, Clement Mathieu ; foreword by**  
LOZE.                      **Marcel Jamagne.**  
Rotterdam : Balkema, 1991.

Covers the physical, chemical and biological properties of soils, their evolution and use. Also includes related terms in mineralogy, agricultural hydrology and surface hydrology.

**Online**                    **A dictionary of weights, measures and units**  
**Resource**                Oxford Online Reference

1500 clear definitions of all the units, prefixes, and styling of the Système International (SI), as well as industry-specific and traditional terms currently in use.

363.7003                    **McGraw-Hill concise encyclopedia of environmental science.**  
MCCR                      New York : McGraw-Hill, 2005.

800 entries organised alphabetically covering all the principle areas of environmental science. Subjects covered include: agriculture, climatology, ecology, environmental engineering, epidemiology, forestry, geochemistry, geography and mapping, geology, microbiology, oceanography, plant pathology and zoology. Many entries are also illustrated. Includes cross references, appendices and an index.

**Baill**                      **McGraw-Hill encyclopedia of science & technology**  
503                          New York : McGraw-Hill, c2002  
MACG.

7100 cross referenced articles covering 97 major subject areas of modern science and technology. Includes important developments and achievements. Articles include a definition and background material and, for some articles, bibliographies. Authors and contributors are included in an index which lists their affiliation etc. Analytical and topical indexes are included in volume 20.

*Online Resource*            **The Oxford companion to the history of modern science**  
Oxford Online Reference

600 articles cover all disciplines, historical periods, concepts, and methodologies and philosophies in the history of modern science. Also includes 100 biographies of iconic historic figures, chosen for their contributions to science and the interest of their lives. International in scope.

547.013            **The Oxide handbook. Edited by G. V. Samsonov. Translated from Russian**  
SAM            **by C. Nigel Turton and Tatiana I. Turton.**  
New York, IFI/Plenum, 1973.

Tables relating to the properties of oxides in a wide range of temperatures and other external conditions.

503            **Tables of physical and chemical constants and some mathematical functions**  
KAY            [London] : Longman, [1973]

Includes four sections on General Physics, Chemistry, Atomic and Nuclear Physics and Mathematical tables. The section on **general physics** covers: units; fundamental constants; measurement of mass, pressure and other mechanical quantities; mechanical properties of materials; temperature and heat; acoustics; radiation and optics; electricity and magnetism; astronomy and geophysics; and miscellaneous engineering data.

The section on **chemistry** covers the elements; properties of inorganic compounds; properties of organic compounds; vapour pressures and boiling points; critical constants and second virial coefficients of gases; properties of solutions; properties of chemical bonds; nuclear magnetic resonance and Mossbauer effect; electrochemistry; chemical thermodynamics; miscellaneous chemical data.

The section on **atomic and nuclear physics** covers: free electrons and ions in gases; work function; electrons in atoms; x-rays; absorption of particles and dosimetry; radioactive elements; nuclear fission and neutron interactions; nuclei and particles.

The section on **mathematical tables** covers: functions; statistical methods for the treatment of experimental data.