

SELECTED INFORMATION: MATERIALS SCIENCE

<http://alfredstate.edu/library>

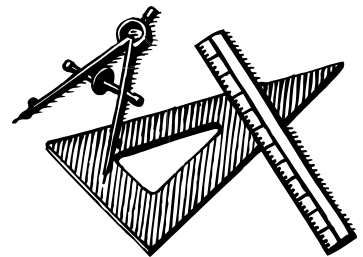
BOOKS AND MORE

Link to the [ASC catalog](#) and search by subject for terms such as:

- Strength of materials
- Materials-fatigue
- Building materials
- Specific materials such as Plastics, Steel, Wood, Concrete etc.

PERIODICAL ARTICLES

- [Academic Search Complete](#)
- [Computers & Applied Sciences Complete](#)
- [ProQuest](#)
- [Science Direct](#)



NEWSPAPERS: COMMODITY PRICES

Wall Street Journal Section C (Money & Investing)

PRICES: PRODUCTS AND SERVICES DIRECTORIES

Chemical Engineering Buyers Guide Ref.TP 158 c 47)

SELECTED REFERENCE MATERIALS

GENERAL

CRB Commodity Yearbook (Ref. HF1041 C56)

Includes year-end prices, as well as production information, for a large number of commodities.

Encyclopedia of Chemical Technology (Ref.TP9 E685 1992 25 vols.)

Gives a very thorough treatment of all subjects including individual materials.

Machinery's Handbook (Ref. TJ151 M3) LATEST EDITION ON RESERVE

Includes sections on the strength of materials, their properties, treatment, and testing of materials.

McGraw-Hill Encyclopedia of Science and Technology (Ref. Q121 M3 2007)

This comprehensive encyclopedia includes excellent articles on individual materials.

MATERIALS SCIENCE

Composite Materials Handbook (Ref. TA418.9 C6 S38 1992)

Includes data on fabrication, performance, processing, handling, & applications of composites.

CRC Materials Science and Engineering Handbook (Ref. TA403.4 C74 1994)

Provides statistical information about the properties and selection of materials.

Engineered Materials Handbook (Ref. TA403 E497 1987)

Provides information on composites, engineering plastics, adhesives/ sealants, ceramics and glass.

Materials Handbook (Ref. TA402 B73 1997)

Describes materials in terms of composition, production, major properties, characteristics, and uses.

Materials Selection in Mechanical Design (Ref. TA403.6 A74 1992)

Presents information on engineering materials and their properties.

METALS

ASME Handbook (Ref. TJ233 A57 4 vols.)

Includes information on metals engineering design and processes and metals properties.

ASM Handbook (Ref. TA459 M43 10th ed.)

Covers all aspects of metals. See also *Metals Handbook* (Ref. TA459 A5).

Rare Metals Handbook (Ref. TA459 H28)

Includes reference data on over 30 rare or uncommon metals.

Also: *ASM Metals Reference Book* (Ref. TA459 A78)

PLASTICS

Concise Encyclopedia of Polymer Science and Engineering (Ref. TP1087 C66 1990)

Covers polymeric materials, natural and synthetic; polymer properties; synthesis and reactions; analytical methods, physical processes.

Modern Plastics Handbook (Ref. TA455 P5 M62 2000)

Provides technical information on all aspects of plastics materials and processes.

CONCRETE

ACI Manual of Concrete Practice (Ref. TA439 A358 1997)

Focuses on the materials and general properties of concrete including construction practices, inspection, uses of concrete, specifications, properties, and special processes.

Also: *Concrete Construction Handbook* (Ref. TA681 W23 1974)

WOOD

Wood Engineering and Construction Handbook (Ref. TA 666 W63 1997)

Chapter 1 provides engineers, architects and others with a source of information on the physical and mechanical properties of wood.

Wood Engineering Handbook (Ref. TA419 W78 1982)

Provides information on the physical and mechanical properties of wood.

Also: *Timber Construction Manual* (Ref. TA666 T47) and *Wood handbook: wood as an engineering material* (Ref. S21 A37 no. 72)

SELECTED INTERNET RESOURCES

Current Price Lists <http://www.discountsteel.com>

Discount Steel - the leading source for acquiring all types of metals, in all shapes and grades

Materials Science Resources on the Web <http://www.istl.org/02-spring/internet.html>

This is a guide to web resources developed by a librarian at Iowa State University.

MatWeb <http://www.matweb.com>

This is a commercial site that offers a free materials information database that includes the engineering properties, the manufacturer, and the composition of over 21,580 materials.

NyMex : the New York Mercantile Exchange <http://www.nymex.com>

Provides current commodity prices for a variety of materials.

Sigma-Aldrich Materials Science

<http://www.sigmaaldrich.com/materials-science/material-science-products.html>

This company's chemical and biological products and kits are used in scientific research and as key components in high technology manufacturing. Of special interest is the section on "New Products for Materials Research & Engineering." Includes price information.

U.S. Geological Survey Mineral Resources Program <http://minerals.usgs.gov/>

The Mineral Resources Program funds science to provide and communicate current, impartial information on the occurrence, quality, quantity, and availability of mineral resources, includes commodity information.

WebElements Periodic Table <http://www.webelements.com/>

"WebElements aims to be a high quality source of chemistry information on the WWW relating to the periodic table."

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Materials Science Bibliography Fall 2010


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