

Chemistry Subject Guide

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Chemistry is the study of the composition, structure, properties, and reactions of matter, especially of atomic and molecular systems.

Introductory Resources

- **Subject Introduction**

Introduction to General, Organic, and Biochemistry, 7th ed.
Frederick A. Bettelheim
Belmont, CA: Thomson, Brooks/Cole, 2004
[QD31.2 .B48 2004](#)

Editorial Book Description:

“Has become the most respected and best-selling general, organic and biochemistry textbook on the market. Known for the successful way it meets the needs of students who take this course--from re-entry students to those heading directly into careers in the allied health fields--the book is acclaimed for the way it provides students a solid chemistry foundation that will serve them well long after they leave the course.”

Inorganic Chemistry, 3rd ed.
Gary L. Miessler and Donald A. Tarr
Upper Saddle River, NJ: Pearson Education, 2004
[QD151.3 .M54 2004](#)

Editorial Book Description:

“This highly readable book provides the essentials of Inorganic Chemistry with molecular symmetry as its foundation. Chapter topics include atomic structure, molecular orbitals, organometallic chemistry, simple bonding theory, symmetry and group theory, and more. For chemists and other professionals who want to update or improve their background in the field.”

- **Reference Books**

CRC Handbook of Chemistry and Physics: A Ready-reference Book of Chemical and Physical Data
David R. Lide
New York, NY: Taylor & Francis, 2007-08
[QD65 .H3 2007-08](#)

Dean's Handbook of Organic Chemistry, 2nd ed.
George W. Gokel
Chicago, IL: McGraw-Hill, 2004
[QD251.3 .G65 2004](#)

The Facts on File Dictionary of Inorganic Chemistry
John Daintith, ed.
New York, NY: Facts on File, 2004
[QD5 .F34 2004](#)

The Facts on File Dictionary of Organic Chemistry
John Daintith, Ed.
New York, NY: Facts On File, Inc., 2004
[QD246 .F33 2004](#)

Handbook of Inorganic Chemicals
Pradyot Patnaik
Chicago, IL: McGraw-Hill, 2003
[QD155.5 .P37 2003](#)

Find Books & Media

Resources in the APU University Libraries can be found by using the [APOLIS2](#) online catalog.

- **Subject Headings & Call Number Ranges**

Alchemy	QD13-26, Q125
Bases (Chemistry)	QD477
Biochemistry	QD415, QK898.A4, QP514.2, QH505
Catalysis	QD501-505
Chemistry, Inorganic	QD31-1515
Chemistry, Organic	QC454, QD251-708
Chemistry, Physical and theoretical	QC23-477, QD453-911, QH505, TN690
Electrochemistry	QD115-555
Environmental chemistry	GB855, QC879, QD31, QH31, TD193
Geochemistry	QC880, QD466, QE515

- **Books**

Biochemistry Explained: A Practical Guide to Learning Biochemistry
Thomas Millar
New York, NY: Toutledge/Taylor & Francis Group, 2002
[QD415 .M55 2002](#)

Descriptive Inorganic Chemistry, 3rd ed.
Geoffrey Rayner-Canham
New York: W.H. Freeman, 2003
[QD151.5 .R39 2003](#)

The Joy of Chemistry: The Amazing Science of Familiar Things
Cathy Cobb and Monty L. Fetterolf
Amherst, NY: Prometheus Books, 2005
[QD35 .C56 2005](#)

Organic Chemistry, 3rd ed.
Marye Anne Fox
Sudbury, MA: Jones and Bartlett, 2004
[QD251.3 .F69 2004](#)

- **Subject Bibliographies**

Chemistry on the Internet: A Student's Guide 1999-2000
Thomas Gardner
Upper Saddle River, NJ: Prentice Hall, 1999
[QD9.3 .G37 1999](#)

How to Find Chemical Information: A Guide for Practicing Chemists, Educators and Students
Robert E. Maizell
New York, NY: John Wiley & Sons, Inc., 1998
[QD8.5 .M34 1998](#)

Library Handbook for Organic Chemists
Andrew J. Poss
New York, NY: Chemical Pub., 2000
[Z5524.08 .P67 2000](#)

- **Resources in Non-APU Libraries**

[LINK+](#) LINK+ is a single catalog for 40+ California libraries that have a cooperative borrowing and lending arrangement for books only. This service is for APU faculty, staff and students, and is free. Items usually come within 2-3 work days.

[WorldCat](#) WorldCat is a single catalog for hundreds of North American and international libraries. Books and other library resources may be requested from this catalog through the [Interlibrary Loan](#) service. This service is for APU faculty, staff and students, and costs \$2.00 per item requested. Items usually come within 7-10 work days.

Find Journal Articles

Resources in the APU University Libraries can be found by using the [APOLIS2](#) online catalog.

- **Journals**

Title	Available Formats
Journal of the American Chemical Society	Online
Chemical Reviews	Print Online
Accounts of Chemical Research	Print Online
Nano Letters	Online
Biochemistry (ACS)	Online

- **Databases**

[Academic Search Premier](#)

[Chemistry Journals](#)

[MEDLINE](#)

[ProQuest Databases](#)

SciFinder (located on public computers in the Wynn Science Building)

[Web of Science](#)

- **Getting Journal Articles**

[Periodical Finder](#)

Sometimes while using a database, article records are found without any corresponding full-text article. Use Periodical Finder to see whether or not the article can be found in full-text in a different database. It can also be used to look up the full-text availability of items found in bibliographies.

[Articles not at APU](#)

If a journal article is unavailable in either the print journal collection or one of the online databases, it can be requested through the [Interlibrary Loan](#) service.

Find Internet Resources

- **Professional Organizations and/or Government Agency Websites**

[American Association for the Advancement of Science](#)

[American Chemical Society](#)

[American Institute of Chemical Engineers](#)

[Biochemical Society](#)
[ChemSoc – Chemical Societies Network](#)
[International Union of Pure and Applied Chemistry](#)
[National Academy of Sciences](#)
[National Science Teachers Association](#)
[Royal Society of Chemistry](#)
[Society of Chemical Industry](#)

- **Other Websites**

[*Department of Chemistry University of Oxford*](#)

Contains chemistry and related information on the Internet. “A set of pointers to the many large Chemistry link collections already available and direct links to a few sites of special interest.” Includes: guides, training, bibliographic databases for journals, conference proceedings, reports, patents, theses, web sites dealing with safety, mailings lists and news groups.

[*Bibliographic Index Plus \(WilsonWeb\)*](#)

A collection of bibliographies of bibliographies. At the search engine type “chemistry” and more than 2,000 records are retrieved dealing with bibliographies and literature reviews on chemistry found in journals and books (back to 1982).

[MolviZ.Org](#) (Molecular Visualization Resources)

Brings together many types of molecular visualization resources including Jmol, Chime, RasMol. Also included are interactive tutorials, software for molecular exploration and description of selected macromolecules.

[Thirty-Two Free Chemistry Databases](#)

Includes the “granddaddy of all free chemistry databases” PubChem (search over 8 million compounds), eMolecules (augments PUbChem with other information sources), CHEBI (a dictionary fo molecular entitles focused on small chemical compounds), NMRShiftDB (organic structures and their nuclear magnetic resonance chemical shifts), ChemBank (36,000 original biological assays of small molecules collected by Harvard’s Institute of Chemistry and Cell Biology) and many others.

[UCLA’s List of Chemical Resources](#)

Includes lists of university chemistry departments, non-profit & commercial chemistry organizations, other links to chemistry resources and chemistry publications.

- **Free Online Journals**

[Chemical Education International](#)
[Free Full-Text Journals in Chemistry](#)
[Journal of Chemical Education](#)

- **Blogs/RSS Feeds**

Chemistry.org Newsletter

News at the American Chemical Society Website

Page: <http://chemisty.org/>

Feed: http://feeds.feedburner.com/corg_newsletter

Heart Cut

Reviews of new and significant chemistry journal articles

Page: <http://www.chemistry.org/portal/a/c/s/1/acdisplay.html?DOC=heartcut\index.html>

Feed: <http://feeds.feedburner.com/ACSHeartCut>

Patent Watch

Important new chemical patents

Page:

<http://www.chemistry.org/portal/a/c/s/1/acdisplay.html?DOC=patentwatch%5Cindex.html>

Feed: <http://feeds.feedburner.com/ACSPatentWatch>

Don't have a feed reader? Try Google Reader (<https://www.google.com/reader/>) or Bloglines (<http://www.bloglines.com/>).