Guide to

Chemical Research

Presenters:

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Introduction

- Chemistry students often want specific data, like a boiling point, rather than an array of journal articles on a topic.
- Library catalogs are not organized to lead students to specific chemistry data.
- Most librarians do not have any chemistry background.
- How can students find specific chemistry data?

Our Database

- Designed to be used by anyone student, faculty, librarian, or community member.
- Does not require extensive knowledge of chemistry.
- Can be used remotely via the Internet.
- Can be used for other subjects.

Parts of the Database

• Public View:

Alphabetical List of Terms

Source List (of books, suppliers, etc.)

• Administrative View:

Complete Terms List

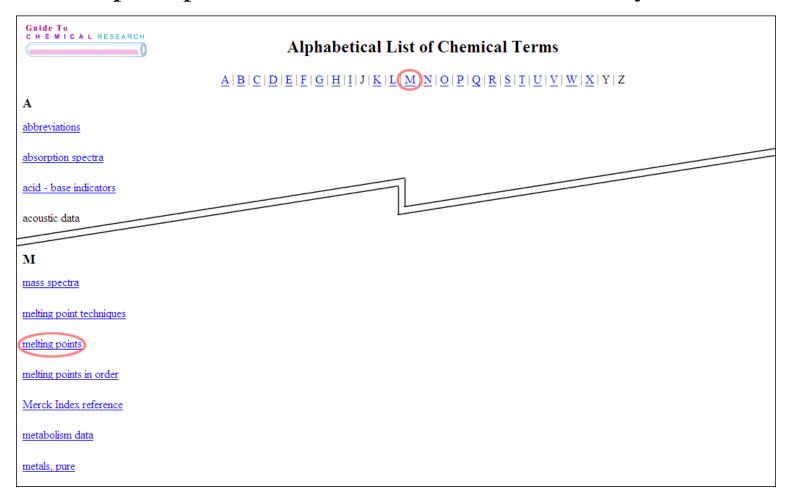
Complete Sources List

Add Term

Add Source

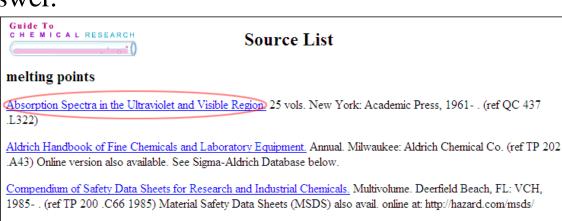
Public View -Alphabetical List and Sources List

A simple alphabetical list of common chemistry terms.



Public View --Alphabetical List and Source List

• When a word is chosen, sources will be displayed that may give an answer.



<u>Dictionary of Inorganic and Organometallic Compounds.</u> Online version is within a database called CHEMnetBase. Connect through this title's link.

<u>Dictionary of Inorganic Compounds.</u> 5 vols. London: Chapman and Hall, 1992. (ref QD 148 .D53 1992) Online version is called Dictionary of Inorganic and Organometallic Compounds within a database called CHEMnetBase. Connect through this title's link.

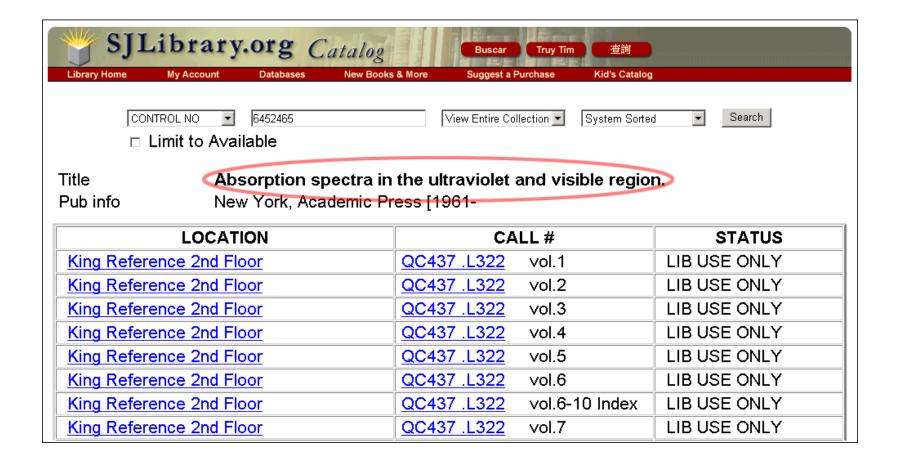
<u>Dictionary of Natural Products.</u> London: Chapman and Hall, 1993?- . Online version is within a database is called CHEMnetBase. Connect through this title's link.

<u>Dictionary of Organic Compounds.</u> 5th ed. 7 vols + suppls. New York: Chapman and Hall, 1982- . (ref QD 246 .D5 1982) Library has both printed and online versions. Newer online version is in CHEMnetBase. Connect through this title's link.

Dictionary of Substances and Their Effects. 2nd ed. 7 vols. England: Royal Society of Chemistry, 1999. (ref RA 1193 .D53 1999x)

Huntress, Ernest H. Identification of Pure Organic Compounds. New York: John Wiley and Sons, 1941. (ref QD 291 .H8)

Public View -Alphabetical List and Sources List



Public View --Source List

Can be any type of useful source:

- books
- web sites
- electronic databases
- other?

Administrative View

Administrative View

- This part is not on public view.
- It allows the administrator to add, delete, change, or update any record in the Source List or the Alphabetical List.
- In addition, one can add or delete *connections* between the words and the sources.
- It is called the Terms and Sources Manager.

Terms and Sources Manager

Has four administrative parts for adjusting the entire database:

- 1. Complete Terms List
- 2. Complete Sources List
- 3. Add Term
- 4. Add Source

Complete Terms List

- View terms in alphabetical order with connected sources underneath.
- Administrator can edit, delete, or dissociate all the sources under each term.

Terms and Sources Manager
Search for in term in term add term add source Submit
abbreviations [edit]
Lenga, Robert E. (ed.) Sigma-Aldrich Library of Chemical Safety Data. 2d ed. 2 vols. Milwaukee: Sigma-Aldrich Corp., 1988. (ref T 55.3 .H3 S54 1988x) [edit] [delete] [dissociate]
absorption spectra [edit]
Absorption Spectra in the Ultraviolet and Visible Region. 25 vols. New York: Academic Press, 1961 (ref QC 437 .L322) [edit] [delete] [dissociate]
acid - base indicators [edit]
<u>Data for Biochemical Research.</u> 2d ed. New York: Oxford University Press, 1969. (ref QH 324 .D28 1969) [edit] [delete] [dissociate]
National Research Council (U.S.). <u>International Critical Tables of Numerical Data, Physics, Chemistry and Technology.</u> [NOTE: SEE VOL. 1]. 7 Vols. New York: McGraw-Hill, 1926-33. (ref Q 199 .N32). Also available online through this title's link. Use search box in online version. [edit] [delete] [dissociate]
Lange's Handbook of Chemistry. 15th ed. New York: McGraw-Hill, 1999. (ref QD 65 .L36) [edit] [delete] [dissociate]

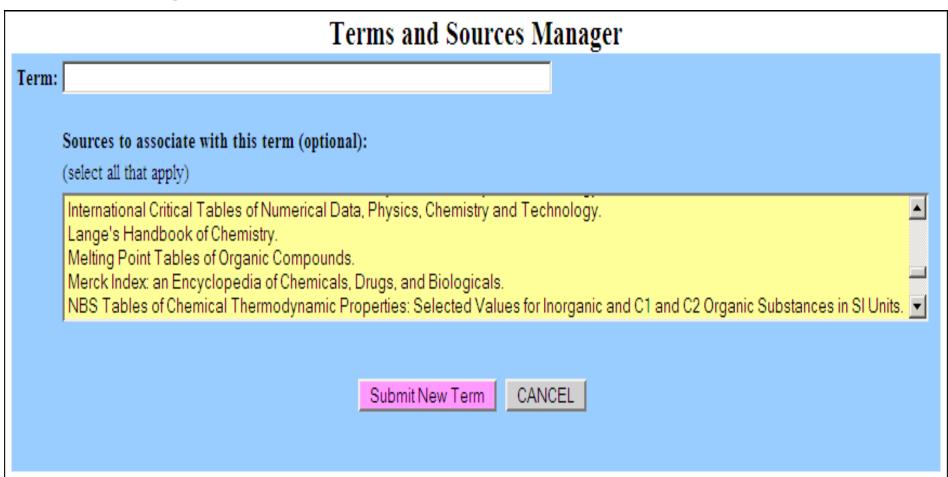
Complete Sources List

- Sources can be edited or deleted here.
- Terms can be dissociated from sources.



Add Term

- Adds terms to the Alphabetical List.
- Connects the terms to a source.



Add Sources

- Administrator can add new sources into the Source List.
- Choose any terms from the alphabetical list to lead to this source.



Technical View

System requirements to run this program:

- MySQL
- PhP and Web server software such as Apache.

Questions?