

By J. E. Mihalick, 1997; revised J. H. Gutow 1998,1999, 2001, 2005

The database is usually accessed through an STN academic account, which gives us a 90% discount but restricts use to evenings and weekends (Sun-Thurs 5 PM to 5 AM; Fri 5 PM to 9 PM; Sat 2 AM - 5 PM). The cost of the search is paid by the library. Any networked computer with a Telnet program or a web browser may be used. *For the purposes of this class only, temporary accounts have been created which are active during the day. Each computer station will be provided with a login ID and a password by the instructor.*

Detailed instructions and exercises for learning to use the database may be downloaded from the Chemical Abstracts web site at <http://www.cas.org/>.

An appointment may be made with a reference librarian to get assistance with a Chemical Abstracts search. Sarah Neises (e-mail neises; phone 0401) has been trained on the software and works some evening hours.

#### I. Connecting to Chemical Abstracts Online Using STNEasy

- A. Start your web browser and connect to <http://www.cas.org/>.
- B. Select STNEasy from the sidebar.
- C. Type in your login ID and password.
- D. Once logged in make sure that **ADVANCED SEARCH** is selected from the list at left.
- E. Choose the Category and Database
  1. Normally: Chemistry References.
  2. If you are looking for a substance use: Chemical Substance.
- F. Some additional search and display options may be set in the preferences option at left. The Defaults are recommended.
- G. Conduct your search (see below).
- D. When done LOGOFF. All your search results are deleted when you logoff so take notes, print screens or save the files to disk as you are working.

#### II. Searching

- A. The database search engine is essentially Boolean, which means that it picks sets of references out of the database using combinations of keywords combined with “and”, “or” and “not”. With the aid of the STNEasy interface searches can be somewhat more sophisticated than that.
- B. Subject searches (in **ADVANCED MODE**)
  1. You can search by words much as you can in **BASIC MODE**.
  2. You can also combine terms explicitly with “and”, “or” and “not”.
  3. Putting “?” or “\*” at the end of a word or root looks for all words that begin with those characters.
  4. To get exact phrase matches (no intervening words) enclose the phrase in quotation marks.
  5. You can also limit the year range, journal, place of origin, etc, by choosing the proper categories from the pop-up menus.
  6. You can include the author(s) as one of the criteria. See below for important information on searching author names.
  7. **IT IS USUALLY BETTER TO START WITH A ONE OR TWO WORD PHRASE AND THEN REFINE THE SEARCH IF YOU COME UP WITH TOO MANY REFERENCES (>25 TO 100 dependent on what you are doing). A BUTTON TO REFINE A SEARCH IS PROVIDED, WHICH ALLOWS YOU TO ADD MORE CRITERIA TO YOUR SEARCH.**
  8. Click search once your criteria are set.
  9. References with titles will be listed 5 at a time. See section III below for information on displaying references.

C. Author searches (in ADVANCED MODE)

- a. Select "Author" from the first popup menu in the search term area.
- b. Enter as much information as you know about the author's name in the "Author" windows. It is recommended that you check "Use Initials".
- c. Click **browse index**. This will give you an expanded window listing all the names alphabetically near your author's name. If you have an author with a common last name and no initial you may have to scroll a long ways to find the appropriate entries. Select as many as are correct for your author. Multiple contiguous selections are usually done by holding down the SHIFT key while clicking on the entries. Multiple discontinuous selections are usually done by holding down either the CMD key or the  key. *This step is very important since many authors are in the database in multiple forms (e.g. full name, last + initials, etc.).*
- d. Now you may click search.
- e. References with titles will be listed 5 at a time. See section III below for information on displaying references.

D. Substance searches

1. In ADVANCED mode click **select category** and choose: Chemical Substances. Once you have selected this your searches will be done within the Registry file, where the link between compounds and registry numbers is kept.
2. It is possible to search the registry file by compound name or formula. Using additional software (STNExpress/SciFinder) you can also do structure searching.
3. To Search: pick the "compound name" or "formula" from the pop-up menus and enter all forms of the name or orderings of the formula that you can think of. Use additional fields for additional entries. Then click **search**.
  - a. More than one registry number may be displayed. You will have to look at the entries to determine which is the compound/substance you want. Copy this number down.
  - b. Use the links at the bottom of each appropriate entry to search in the Chemistry References database. Note that you can restrict the search somewhat using selections from the scrolling window.

E. Citation Searching

1. When you find a reference that is useful you can also search for things that have referenced this work. This is a good way to find related more recent work.
2. Look at the references section of a displayed entry on a reference. Near the bottom will be a list of references in this article and an link to search for articles referencing the article found in the database. Use this last link to look for more recent articles.

III. Displaying results

- A. As you browse through the list of titles you may check which entries you want a full display of.
- B. Choose your display options from the pull down menus
- C. Click the 'Display' button.
- D. Try to limit the number of entries you display. There is a charge per displayed entry.
- E. The final results screen should be saved to disk even if you copy down the information you want by hand.
- F. You can also use the browser to print this list. The problem is they often get very long.