

In-Class Examples for Gaining Familiarity with SciFinder Scholar

Online help with SciFinder Scholar: www.cas.org/SCIFINDER/SCHOLAR/resources.html

Launch SciFinder Scholar from a computer on which it has been installed. At Oberlin these are the computers in the Science Library and in the chemistry computer laboratory. There are no restrictions on when you can use SciFinder Scholar, except from 6 p.m. Saturday to 2 a.m. Sunday when it is down for maintenance. However, since Oberlin is allotted only two seats (shared with two other schools), you may not always find that you are able to gain access.

A. Explore by Research Topic

Click the **Research Topic** box in the Explore window. In the box type in "p-cresol in urine", then click **OK**. A list of *candidates* (set of search terms) is provided. Note carefully what candidates are given, the associated *concepts* (search terms), and how many references are indicated. Complete the table.

Candidates	Search terms	# references
<i>as entered</i> (exact match)		
<i>closely associated</i> (in same sentence)		
<i>anywhere in the reference</i> (in record)		
single terms anywhere		
single terms anywhere		

Check the box for the *closely associated* candidate and click **Get References**. Click **Analyze/Refine** and then **Analyze**. Analyze gives an accounting of the numbers of references in particular categories. Scan the choices and then go **Back**.

Click **Analyze/Refine** and then **Refine**. Scan the choices. Click **Research Topic** and type "sheep" in the box. Click **OK**. Note the number of references: _____. To review your search click **History** along the tool bar at the top of the page. Close the window when you are done reviewing your search.

Click **New Task** along the top tool bar. Click the **Research Topic** box in the Explore window. In the box type in "p-cresol in sheep urine", then click **OK**. Record the number of *anywhere in the reference* references: _____. Go **Back** and search for "p-cresol in the urine of sheep". Record the number of *anywhere in the reference* references: _____.

Compare the three sets of results. Are the numbers the same? The particular way you search in SciFinder has an impact on what you find. Searching in several different ways may be the best tact to find all of the references on your particular topic.

Click **Back** and search "p-cresol in the urine of lambs". How does the result compare to the last search? SciFinder automatically searches with synonyms from its synonym dictionary.

Click **Back** and enter "determination of antioxidants in vegetables" as your search topic. Click **Additional Options**. Additional Options is like doing Refine (with more limited options), but before the search rather than after the search. Choose to limit to the English language. Click **OK** at the very bottom of the window. How many references are associated with the first candidate? _____. Check the box for the first candidate and then click **Get References**. Note the format of the references. Observe that the search terms you entered (and variants) are highlighted in the titles of the references. The CAPLUS references are listed first, followed by the MEDLINE references. Both are given in reverse chronological order.

Scan the list of references and locate the article by Y. Guan in *Food Chemistry*. Click on the **microscope icon** to see the full record of this reference. Observe that the search terms, including variants, abbreviations, and synonyms, you used are highlighted. Note the abstract, the indexing terms, the CAS Registry Numbers for some substances, and the list of citations in the paper. Clicking on an underlined CAS Registry Number brings up that substance. Clicking on an underlined citation allows you to view its abstract (equivalent to having clicked on its microscope icon). One can perform a sort of cited reference search by following the links back. Click the **Close** box.

Click the **computer icon** for the same reference. Netscape will be launched and you will be taken to ChemPort, which is where SciFinder Scholar takes you to get an electronic copy of a reference article. We can only access articles in journals to which Oberlin College subscribes or has access to through OhioLINK. To do this, click on **OhioLINK EJC**. This will take you to OLinks. The article can be downloaded by clicking on View Full Text ... and then Article Full Text PDF, but do NOT do that now.

Return to the SciFinder Scholar window and refine your list of references by clicking on **Analyze or Refine References**. Click **Analyze** and then **Author Name**. Which author has published the most papers in your list of references? _____

Go back to the original set of references. Check the box in front of each of several references to select them. From the **Tools** menu select **Keep references**. All but these references are discarded. The selected references can be viewed in several different ways. Go to the **View** menu and look at the differences among the four options. Return to the **standard** format.

A set of references may be saved to a file on your computer or disk. Click on the **Save As** icon on the toolbar. Enter a title for the document. Pull down the menu labeled **File Type** and select the format for the file. Saving the file in Rich Text Format (rtf) retains much of the formatting, e.g. bold or color. With rtf format selected, the **Options** button allows the choice of formats (as explored under the **View** menu). Select a place to save the file (e.g. Desktop) and click **Save**. Saved files can be printed later.

B. Explore by Author Name

Click on **New Task** and then explore by **Author Name**. We want to find all of the works by Daryle H. Busch. What is the best way to search for this author? Enter the name you selected _____, then click **OK**. Not all of the candidates offered are correct. How can you pare down to a likely list? Select the boxes of all the candidates that are appropriate. Click on **Get References**. How many references did you find? _____.
{The instructor found 465 references that likely have been authored by this chemist.}

How many of the references report work done at the Ohio State University? _____
Describe your strategy. Does this last activity give you a clue how you might eliminate works not really authored by the Daryle H. Busch?

C. Explore by Substance Identifier

Click on **New Task** and then explore by **Chemical Substance or Reaction**. Select **Substance Identifier**. Enter "ibuprofen" and click **OK**. Click on the **microscope icon** to look at the full record. Click **Close** to return to the candidate window. Click on **Get References**, and arrange to retrieve only those relating to preparation, then click **OK**. How many references did you find? _____

Of these how many are references to patents? _____

Of these patents how many were issued to the Upjohn company? _____

Additional Search Exercises

1. The Nobel Prize in chemistry was awarded to three people in 2001 "for discovery and development of conductive polymers". One recipient was Alan G. MacDiarmid. How many research papers did he publish between and including 1975 and 1985? How many of these papers refer to conducting polymers or plastics within the title? Are any patents in his name? Describe the search strategies you used to focus the results on patents and terms in the title. Display three of the records that you found. Where was the work performed (author's affiliation)?

2. Use SFS to explore separating barium and calcium ions from one another. Refine your initial set of references to only complexes and to journal articles in English.

Report the exact phrasing of the search topic you used and how you refined your search. Give the number of references you obtained at each step. Give in ACS format the citations of the two references you believe are the most relevant to the topic.

Obtain an electronic copy of one article (not necessarily one of the two most relevant) in a journal to which the Science Library does not subscribe and describe how you obtained it.