Finding and Managing Scientific Information

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Research Guide: http://lib.guides.umd.edu/chemistryresources
Click on the tab “Course Materials” to find a specific course.

Instructional videos: http://lib.guides.umd.edu/chemistryresources/instructions

STEM Library: https://www.lib.umd.edu/stem

UMD Libraries Web page: http://www.lib.umd.edu

Finding scientific literature

- Google Scholar
- PubMed
- SciFinder (create an account using your @umd.edu email address)
- Web of Science
- Knovel

Finding property information

- ChemSpider
- PubChem
- CRC Handbook of Chemistry and Physics
- Merck index
- Reaxys
- SciFinder

Difference between a Research article and a Review article: Research articles, called primary sources, provide direct or firsthand evidence about an experiment, event, object, person, or work of art. They have a Materials & Methods section (it could be called just “Methods” or “Experimental”) that describes how the experiments were performed. Review articles are secondary sources, as they describe, discuss, interpret, comment upon, analyze, evaluate, summarize, and process primary sources. They usually DO NOT have an experimental section.

Bibliographic Management Programs:

- EndNote Online
- Mendeley
- Zotero
EndNote Online (Formerly, EndNote Web)

Instructional videos: [http://lib.guides.umd.edu/chemistryresources/instructions](http://lib.guides.umd.edu/chemistryresources/instructions)

Create an account for EndNote Online: [www.myendnoteweb.com](http://www.myendnoteweb.com)

Install the EndNote Word Plug-in and Capture button

Collecting references with EndNote Online

**Collect—Online Search**: allows searching databases (e.g., PubMed) and library catalogs directly from EndNote Online
New Reference: allows creating a record manually.

Collect—Import references: allows importing references downloaded from databases to a computer
Creating a bibliography with EndNote

Inserting Citations in a Word document: Cite While You Write (CWYW)
You would need to download EndNote Word Plug-ins (see the picture on the top of p. 2). Once you do it, you will see a tab for EndNote in Word.
Finding Literature in PubMed


Instructional videos: http://lib.guides.umd.edu/chemistryresources/instructions

If you perform a search by entering key words in the general box next to PubMed on the main page, you will retrieve all articles that have mentioned these words. To avoid getting too many hits, you can use the indexing capabilities of PubMed to retrieve only articles that are specifically devoted to your topic. This will allow you to get literature that is much more relevant and significantly fewer hits. To do that, click on Advanced and follow the instructions below.

On the main PubMed page (https://www.ncbi.nlm.nih.gov/pubmed), select “Advanced” to use the indexing capabilities of the database that will allow you to find works that are specifically devoted to the topic you are interested in.

Select references for export and click on the Capture Reference bookmarklet in your bookmarks toolbar.
Filtering search results with Web of Science and exporting them to EndNote

Important: References exported directly from databases to EndNote will be found in the UNFILED group in EndNote Online.
Finding Literature with SciFinder

Instructional videos: [http://lib.guides.umd.edu/chemistryresources/instructions](http://lib.guides.umd.edu/chemistryresources/instructions)

SciFinder searches simultaneously two large literature databases, the Chemical Abstracts database and MEDLINE (PubMed). You would need to create an account for SciFinder using your @umd.edu email address.

**Accessing SciFinder from off-campus**

![SciFinder Interface](image)

Important: Select the option “references were found containing both of the concepts...”
References exported from SciFinder are imported into EndNote as shown on pp. 3-4 of this handout.
Finding properties of chemical compounds in SciFinder by chemical name

See instructional videos at http://lib.guides.umd.edu/chemistryresources/instructions

Finding properties of chemical compounds in SciFinder by structure searching
Finding properties of chemical compounds in Reaxys
See instructional videos at http://lib.guides.umd.edu/chemistryresources/instructions

Click on “Create Structure or Reaction Drawing.”

**Structure searching in Reaxys**

**Reaction searching in Reaxys**