# Organic Chemistry Research Guide

## Reference Works

Most of these resources are located in the Reference Collection on the 1st floor of John Vaughan Library. However, note that those items with a location of MAIN will be found in the main collection on the 3rd floor.

<table>
<thead>
<tr>
<th>Title</th>
<th>Location</th>
<th>Notes</th>
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<tbody>
<tr>
<td>McGraw-Hill Encyclopedia of Science and Technology</td>
<td>REF Q121 .M3 1992</td>
<td>(several volumes)</td>
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<tr>
<td>MacMillan Encyclopedia of Chemistry</td>
<td>REF QD4 .M33 1997</td>
<td>(several volumes)</td>
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<tr>
<td>A Dictionary of Chemistry (Oxford)</td>
<td>REF QD5 .D4985 2008</td>
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<tr>
<td>Comprehensive Organic Transformations</td>
<td>REF QD262 .L355 1999</td>
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<tr>
<td>Named Organic Reactions</td>
<td>MAIN QD291 .L351 2005</td>
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<tr>
<td>Name Reactions and Reagents in Organic Synthesis</td>
<td>MAIN QD291 .M86 2005</td>
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<tr>
<td>Organic Syntheses Based on Name Reactions and Unnamed Reactions</td>
<td>REF QD262 .H324 1994</td>
<td></td>
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<tr>
<td>Physician’s Desk Reference (PDR) MAIN)</td>
<td>RS75 .P5 (current ed. In REF, earlier editions in MAIN)</td>
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<tr>
<td>Drug Facts and Comparisons</td>
<td>REF RM300 .F33 1999</td>
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Chemistry Journals and Indexes

Most of our current chemistry periodicals are available online, through either ACS Publications Online (http://pubs.acs.org) or ScienceDirect (http://www.sciencedirect.com). For older chemistry articles, you may need to use our print periodicals collection, located on the 2nd floor of John Vaughan Library. Both print and online serials can be searched in the library catalog at (http://library2.nsuok.edu).

SciFinder (http://scifinder.cas.org) allows you to search Chemical Abstracts, which indexes a vast amount of the chemical literature (both ACS and non-ACS publications). In addition, SciFinder allows you to perform searches for compounds and reactions. You must register to use SciFinder (free for NSU students, staff, and faculty) using the SciFinder Registration link on the library’s Articles and Databases page (http://library.nsuok.edu/Indexes/index.html). Please note that SciFinder is currently available from on campus only.

The chemistry resources noted thus far primarily contain peer-reviewed, scholarly articles on a variety of chemical subjects. For popular treatments of chemical subjects, the library’s Academic Search Premier database, which searches across a broad spectrum of popular and academic literature, may be useful.

If we do not have access to an article you need in our print collection or online, you can place a request with our Interlibrary Loan (ILL) department. This service is available at no cost to you.

Research vs. Review Articles

It is important to distinguish between review articles and research articles. A review article’s primary purpose is not to present new research, but to summarize, analyze, discuss, and provide an overview of previously published work on a topic. A research article is designed to present new research, methods, and/or findings.

Research articles often employ the IMRAD (Introduction, Methods, Research, and Discussion) format. See http://www.uta.fi/FAST/FIN/RESEARCH/imrad.html for a more extensive treatment of this format.

What is an annotated bibliography?

An annotated bibliography is partly like the Works Cited or References pages you have created for other assignments in that it contains a list (in proper citation style—ACS style, in this
case) of all of the works you have quoted, referred to, or from which you have used ideas in the
course of creating your assignment.

However, an annotated bibliography has additional material. For each citation, you
should add a 2-3 sentence summary of the source and a 2-3 sentence assessment of the
importance, reliability, and relevance of the source.

2006) will be a valuable resource in constructing your citations for your references.

**Citation Management**

Several software tools for gathering article information and producing bibliographies are
available. Some, like RefWorks, are commercial, and some are open source.

NSU provides access to RefWorks for NSU students and faculty. RefWorks is an online
citation management platform that allows you to store citations and articles, and to generate
bibliographies from your saved citations in a variety of formats. You can sign up for and access
RefWorks though the link provided on our Articles and Databases page:

[http://library.nsuok.edu/indexes/index.html](http://library.nsuok.edu/indexes/index.html)

Zotero ([http://zotero.org](http://zotero.org)) is a free and open source program available for Windows,
Mac OS X, and Linux, and also as an addon for the Firefox web browser. Zotero integrates with
many scholarly resources, allowing you to add citations for articles or books to your Zotero
database with the click of a button. Zotero works with ACS Publications, and can generate
bibliographies in ACS citation style.

**Additional Assistance**

Feel free to drop by the library for additional assistance with these or other research
matters. You can email me (Brandon Oberg) at oberg@nsuok.edu or call me at x3260 (from on
campus) or (918) 444-3260 (from off campus).

If you want a refresher on the use of SciFinder, you are welcome to access the library’s

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