DOCUMENTING SOURCES
ACS (American Chemical Society) STYLE

The following guidelines for citing sources and for constructing a reference list are taken from
The ACS Style Guide: A Manual for Authors and Editors, 3rd ed; Coghill, Anne M. and Garson, Lorrin R., Eds.; American Chemical Society: Washington, DC, 2006. This manual is shelved in Ready Reference by the call number, R 808.02 Am35A.

SECTION I: REFERENCES - Citing in Text

- The three accepted styles for in-text citations are listed below, with examples:
  1. **superscript numbers**
     
     Oscillation in the reaction of benzaldehyde with oxygen was reported previously.\(^3\)
  2. **italicized numbers in parentheses on the line of text**
     
     Oscillation in the reaction of benzaldehyde with oxygen was reported previously (3)
  3. **author's name and date of publication**
     
     The primary structure of this enzyme has been determined (Dardel et al., 1984).

- With numerical reference citations (as in the first two examples), start with 1 and number consecutively throughout the paper. If a reference is repeated, do not give it a new number; use the original reference number. Use only numbers, not combinations of numbers and letters (1 and 2, not 1a and 1b).

- When citing more than one reference at one place, list the numbers in ascending order and separate them by commas (without spaces as superscripts; with spaces on line), or if they are part of a consecutive series, use a dash for three or more.

  ...in the literature\(^2,5,8\) ...were reported\(^3-5,10\)
  ...in the literature (2, 5, 8) ...were reported (3-5, 10)

- Even when references are cited by number, you may also use an author name in the text, directly followed by the reference number.

  Jensen (3) reported oscillation in the reaction of benzaldehyde with oxygen.

- In both systems, if a reference has two authors, give both names (Allison and Perez\(^12\)); if there are more than two authors give only the first name listed and "et al." [Jones et al. (12)].
If citing more than one reference by the same principal author and various coauthors, use the principal author's name followed by "and co-workers" [Brown and co-workers (10, 11)]. If it is necessary to distinguish among several references by the same authors published in the same year, add a, b, c after the date (Jones and Smith, 1980c; Steele et al., 1986b).

- Cite the reference in a logical place in the sentence.

  recent investigations (cite) a molecular mechanics study (cite)
  as described previously (cite) Marshall and Levitt's approach (cite)
  recently were demonstrated (cite) the procedure of Riesberg et al. (cite)

**SECTION II: REFERENCES - Listing**

- Collate all references at the end of the manuscript in numerical order if cited by number and in alphabetical order if cited by author.

- The author is responsible for the accuracy and completeness of all references. The author should check all parts of each reference listing against the original documents.

- A reference must include certain minimum data: for journals--author, abbreviated journal title, year of publication, volume number, and initial page of cited article (the complete span is better); for books--author or editor, book title, publisher, city of publication, and year of publication.

- For material other than books and journals, enough information must be provided so that the source can be identified and located.

- In page spans, use all digits. 2-15 44-49 108-117 2022-2134

**Miscellaneous Citation Information**

The *ACS Style Guide* states on page 305, “If you wish to include additional information about a book that is important for the reader to know, you may add it at the end of the reference with or without parentheses, append it to the title in parentheses before the semicolon, or place it between the title and the publisher.”

Examples:


**BOOKS**

- In publishers' names, delete words such as "Company," "Inc.,” "Publisher," and "Press."
- In the following examples, book titles appear in italics, so they should be underlined in the manuscript.
- Use the following abbreviations and spelled-out forms as indicated, and follow the capitalization shown.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Formulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract (spell out)</td>
<td>p, pp (for page, or pages, with no periods)</td>
</tr>
<tr>
<td>Chapter (spell out)</td>
<td>paper (spell out)</td>
</tr>
<tr>
<td>ed. (for edition)</td>
<td>Part (spell out)</td>
</tr>
<tr>
<td>Ed., Eds. (for editor, editors)</td>
<td>Vol. (for a specific volume, Vol. 4)</td>
</tr>
<tr>
<td>No. (for number)</td>
<td>vols. (for number of volumes, 4 vols.)</td>
</tr>
</tbody>
</table>

**Books Without Editors**


**Books With Editors**


THESSES

- Give the person's name, the level of thesis, the university, and the date as specifically as possible.


PATENTS

- Give the person's name, the patent number, and the year. If possible, include the *Chemical Abstracts* reference as well.


JOURNALS

“Article titles are not essential in reference citations, but they are considered desirable to highlight the contents of a paper and facilitate location in reference libraries.” (The ACS Style Guide, page 291) Examples of entries with and without article titles:


- In references to journals that begin every issue with page 1, include the issue number in parentheses following the volume number.


- Indicate when reference is made to an abstract of an article. If possible, give both the original article and the abstract, separated by a semi-colon.


- Indicate when a reference is to the English translation of an article printed in an non-English-language journal. If possible, also include reference to the original article.

GOVERNMENT PUBLICATIONS

Government publications can be pamphlets, brochures, books, maps, journals, and almost anything that can be printed. They may have authors or editors, who may be individuals or offices, or they may be unauthored. The following are examples of the most commonly cited types. Book and journal titles are set in italic type; titles of other publications and laws are set in Roman face and in quotes.


State and Local Government Publications


REPORTS


Morgan, M. G. "Technological Uncertainty in Policy Analysis"; final report to the National Science Foundation on Grant PRA-7913070; Carnegie-Mellon University: Pittsburgh, PA, 1982.

ABSTRACTS OF MEETING PAPERS


MATERIAL PRESENTED ORALLY

Ford, W. T. Presented at the 189th National Meeting of the American Chemical Society, Miami, FL, April 1985; paper ORGN 79.


UNPUBLISHED MATERIALS

Material accepted for publication but not yet published belongs in lists of literature cited. Strictly speaking, material submitted for publication but not yet accepted and personal communications are not part of the literature and therefore do not belong in lists labeled "Literature Cited", but may be included in footnotes that also include other notes. In ACS books and Biochemistry, material submitted but not accepted and personal communications are parenthetical notes in text, not numbered and not included in the "Literature Cited".

- Material accepted for publication but not yet published:
  

- Material submitted but not yet accepted:
  
• Personal communications:


**ELECTRONIC SOURCES**

**CD-ROMs**

The reference style follows that for periodicals and books, and the designation “CD-ROM” is included, as shown below:


Many books in CD-ROM format are reference books, so they have no authors, editors, or chapter titles.


**Computer Software**

*Program Title*, version or edition; comments; Publisher: Place of Publication, year.

Example:

*Mathematica*; software for technical computation; *Wolfram Research*: Champaign, IL, 1996.

**Electronic Copies of Articles Retrieved from a Database Provider**

Author 1, Author 2, etc. Title of Article. *Journal Abbreviation* [Online] *Year*, *Volume*, Article Number or other identifying information. Database Provider. URL of top page (accessed Month Day, Year).

INTERNET SOURCES

The following list provides examples of citations for common types of Internet sources using the format specified by the ACS Style Guide. The sequence of the elements for each type of citation is given as a guide. Due to the wide variety of electronic resources, some adaptations might have to be made in citing particular sources. For more information, consult with a reference librarian, or refer to The ACS Style Guide: A Manual for Authors and Editors, 2nd ed., pages 108-213.

Recommended Format:

Author (if any). Title of Site. URL (accessed date), other identifying information.

- For a subscription-only site, the URL need not be given.
- Use the title found on the electronic site itself: add the words “Home Page”, Gopher Site”, or “Database” for clarification when needed.
- If the URL does not fit on one line, it may be broken according to these rules:
  1. Break after an ampersand, a slash, or a period, but keep two slashes together.
  2. Do not add a hyphen to the end of a line.
  3. Do not break after a hyphen to avoid confusion as to the hyphen’s purpose.

Online Periodicals

Format:

Author 1; Author 2; Author 3; etc. Title of Article. Journal Abbreviation [Online] Year, Volume, Inclusive Pagination or other identifying information.

Note: Article titles are not essential in reference citations, but they are considered desirable. The page numbers in the citation indicate the location of the article in a particular publication.

Example:


Web Page

Format: Author, if available. Title of page as listed on the site. Address of page (date accessed).

Examples:


JOURNALS

The following is a short list of the most commonly cited journals related to chemistry. Note that one-word titles are not abbreviated (e.g., *Biochemistry, Nature, Science*).

<table>
<thead>
<tr>
<th>Journals</th>
<th>Journals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochem. J.</td>
<td>J. Chromatogr.</td>
</tr>
<tr>
<td>Cancer Res.</td>
<td>J. Endocrinol.</td>
</tr>
<tr>
<td>Chemotherapy (Tokyo)</td>
<td>J. Pharm. Pharmacol.</td>
</tr>
<tr>
<td>Chem. Phys. Lett.</td>
<td>Lipids</td>
</tr>
<tr>
<td>Chem. Rev.</td>
<td>Macromolecules</td>
</tr>
<tr>
<td>CHEMTECH</td>
<td>Mol. Pharmacol.</td>
</tr>
<tr>
<td>Clin. Chem. (Winston-Salem, N.C.)</td>
<td>Organometallics</td>
</tr>
<tr>
<td>Experientia</td>
<td>Steroids</td>
</tr>
</tbody>
</table>

Other commonly used style manuals are available in the library. For information on the TURABIAN format see STUDY GUIDE #11. For information on the MLA (Modern Language Association) format see STUDY GUIDE #15. For information on the APA (American Psychological Association) format see STUDY GUIDE #19. For information on the CBE (Council of Biology Editors) format see STUDY GUIDE #24. If you need another format or writers' manual, please consult with a librarian.

Rev. Aug. 07