QUICK GUIDE: ACS CITATION STYLE

The *ACS Style Guide*, 3rd ed., is the standard citation style for chemistry. This Quick Guide includes the most common formats from that publication. Examples of publication types not included in the *ACS Style Guide* were created based on the most relevant examples available. If writing for publication you should also check the "guide to authors" for the journal to which you are submitting your manuscript.

BOOKS

Several factors, such as whether a book is in a series, is cited in its entirety or only in part, has different editions, etc. can cause variations in the citation format. These are some common formats.

Book with authors (pp 300-304)

Beall, H.; Trimbur, J. *A Short Guide to Writing about Chemistry*, 2nd ed.; Longman: New York, 2001; pp 17-32.

Books with editors (citing the entire book; p 302)

Editors' names can appear in either the author (first example) or the editor position (second example).

Richey, H. G., Ed. *Grignard Reagents: New Developments*; John Wiley & Sons: Chicester, U.K., 2000.

Grignard Reagents: New Developments; Richey, H. G., Ed.; John Wiley & Sons: Chicester, U.K., 2000.

Chapter in an edited book (p 301)

McBrien, M. Selecting the Correct pH Value for HPLC. In *HPLC Made to Measure: A Practical Handbook for Optimization*; Kromidas, S., Ed.; Wiley-VCH: Weinheim, Germany, 2006; pp 89-103.

Books in a series (p 306)

Books published in a series may be cited either as a book (first example) or as a journal (second example). If the latter is used, then the *CASSI* abbreviation for the series title should also be used.

Seeber, G.; Tiedemann, B. E. F.; Raymond, K. N. In *Supramolecular Chirality*; Crego-Calama, M., Reinhoudt, D. N., Eds.; Topics in Current Chemistry 265; Springer: Berlin, Germany, 2006; pp 147-183.

Seeber, G.; Tiedemann, B. E. F.; Raymond, K. N. *Top. Curr. Chem*. **2006**, *265*, 147-183.

Organic Syntheses and *Inorganic Syntheses* (p 305)

Cumulative volumes of *Organic Syntheses* are cited as books (first example); annual volumes of *Organic Syntheses* and *Inorganic Syntheses* are often cited as journals (second example).

Organic Syntheses; Wiley & Sons: New York, 2004; Collect. Vol. No. X, pp 437-441.

Yamamoto, T. *Inorg. Synth*. **1989,** *26*, 204-207.

CONFERENCE PROCEEDINGS AND ABSTRACTS

Print full paper (pp 307-308)

Lindén, M.; Schunk, S.; Schüth, F. In *Mesoporous Molecular Sieves 1998*, Proceedings of the 1st International Symposium, Baltimore, MD, July 10-12, 1998; Bonneviot, L., Béland, F., Danumah, C., Giasson, S., Kaliaguine, S., Eds.; Elsevier: Amsterdam, 1998; pp 45-52 (Studies in Surface Science and Catalysis, v 117).

Print abstracts of papers (p 308)

Pere, J. J. *Abstracts of Papers, Part 1*, 223rd National Meeting of the American Chemical Society, Orlando, FL, Apr 7-11, 2002; American Chemical Society: Washington, DC, 2002; CELL 30.

Electronic abstracts of papers (p 323)

Costello, C. E. Development of "Biomolecule-Friendly" MS Methods. In *PITTCON 2006*, Orlando, FL, March 12-17, 2006 [CD-ROM]; Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy: Pittsburgh, PA, 2007; Session 10, Paper 1.

DATA SETS

Print (pp 314-315)

TRC Spectral Data – Ultraviolet; Texas A&M University: College Station, TX, Apr 30, 1966; No. 969 (4-Methyl-1-phenyl-3-tiapentane).

Data from web sites (based on pp 314-315, 320-321)

National Institute of Advanced Industrial Science and Technology. *Spectral Database for Organic Compounds: SDB;* http://riodb01.ibase.aist.go.jp/sdbs/cgi-bin/cre_index.cgi?lang=eng, No. 2185 (1,2-ethanediol) (accessed March 19, 2007).

Commercial databases (p324)

Reaxys, version 1.0.5968; Elsevier Properties SA: Frankfurt, Germany, 2010; Reaxys RN 2154 (1,2-benzisoxazole).

SciFinder Scholar, version 2006; Chemical Abstracts Service: Columbus, OH, 2006; RN 50-78-2 (acetylsalicylic acid).

DISSERTATIONS AND THESES

Titles of dissertations and theses are optional in print but are required in electronic format.

Print (pp 309-310)

King, K. J. Development of a Pressurized System for Oxidation Studies of Volatile Fluids. M.S. Thesis, The Pennsylvania State University, State College, PA, March 1983.

King, K. J. M.S. Thesis, The Pennsylvania State University, State College, PA, March 1983.

Electronic (p 321)

Abrams, N. M. Efficiency Enhancement in Dye-sensitized Solar Cells through Light Manipulation. Ph.D. Dissertation [Online], The Pennsylvania State University, University Park, PA, December 2005. http://etda.libraries.psu.edu/theses/approved/WorldWideIndex/ETD-1061/index.html (accessed Apr 2, 2007).

ENCYCLOPEDIAS

Print (pp 305-306)

Diagnostic Reagents. *Ullmann's Encyclopedia of Industrial Chemistry*, 5th ed; VCH: Weinheim, Germany, 1985; Vol. A8, pp 455-491.

Electronic (p 320)

Chelating Agents. *Kirk-Othmer Encyclopedia of Chemical Technology* [Online]; Wiley & Sons, Posted July 18, 2003. http://www.mrw.interscience.wiley.com/emrw/9780471238966/kirk/article/chelhowa.a01/current/html (accessed Mar 19, 2007).

JOURNAL ARTICLES AND PREPRINTS

Journal titles use *CASSI* abbreviations. Commonly used *CASSI* abbreviations are listed in the *ACS Style Guide*. Additional sources are in the Resource List at the end of this Quick Guide. Notes clarifying some aspect of the citation may be added at the end.

Print articles (pp 291-296)

Although nice, article titles from print journals are not normally included in the citation.

Larabee, D. C.; Reynolds, T. Y.; Hochberg, R. B. Estradiol-16α-carboxylic Acid Esters as Locally Active Estrogens*. J. Med. Chem*. **2001**, *44*, 1802-1814.

Larabee, D. C.; Reynolds, T. Y.; Hochberg, R. B. *J. Med. Chem*. **2001**, *44*, 1802-1814.

Electronic articles (pp 318-319)

The format for citing e-articles does include the article title.

Vandenabeele, P.; Edwards, H. G. M.; Moens, L. A Decade of Raman Spectroscopy in Art and Archaeology. *Chem. Rev.* [Online] **2007**, *107*, 675-686. http://pubs.acs.org/cgi-bin/article.cgi/chreay/2007/107/i03/html/cr068036i.html (accessed Mar 19, 2007).

Early access articles (pp 318-319)

Padwa, A.; Bur, S. K. The Domino Way to Heterocycles. *Tetrahedron* [Online early access]. DOI: 10.1016/j.tet.2007.03.158. Published Online: Apr 3, 2007. http://www.sciencedirect.com/science?_ob=PublicationURL&_tockey=%23TOC%235289%239999%23999999999%2399999%23FLA%23&_cdi=5289&_pubType=J&view=c&_auth=y&_acct=C000014439&_version=1&_urlVersion=0&_userid=209810&md5=5c2e57fa33f1d0d201397bdd0dd2a3c4 (accessed Apr 3, 2007) (accepted manuscript, has not undergone final copyediting, typesetting, or proof review).

Padwa, A.; Bur, S. K. The Domino Way to Heterocycles. *Tetrahedron* [Online early access]. DOI: 10.1016/j.tet.2007.03.158. Published Online: Apr 3, 2007. http://www.sciencedirect.com/science?_ob=PublicationURL&_tockey=%23TOC%235289%239999%23999999999%2399999%23FLA%23&_cdi=5289&_pubType=J&view=c&_auth=y&_acct=C000014439&_version=1&_urlVersion=0&_userid=209810&md5=5c2e57fa33f1d0d201397bdd0dd2a3c4 (accessed Apr 3, 2007); accepted manuscript, has not undergone final copyediting, typesetting, or proof review.

Preprint servers (p 319)

Ranguelov, B.; Stoyanov, S. Evaporation and Growth of Crystals – Propagation of Step Density Compression Wayves at Vicinal Surfaces. 2007, arXiv: physics/0703265. arXiv.org e-Print archive. http://www.arxiv.org/abs/physics/0703267 (accessed Apr 3, 2007).

MATERIAL SAFETY DATA SHEETS

Relevant section in *ACS Style Guide* on p 315. International Chemical Safety Cards can also fit in this format,

Ethylene Glycol; MSDS No. E5125 [Online]; Mallenckrodt Baker: Phillipsburg, NJ, Feb 25, 1999. http://www.jtbaker.com/msds/e5125.htm (accessed July 23, 2001).

Ethylene Glycol; ICSC No. 0270 (U.S. National Version) [Online]; National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention: Atlanta, GA, 2001. http://www.cdc.gov/niosh/ipcsneng/neng0270.html (accessed July 23, 2001).

PATENTS

Include a reference to *Chemical Abstracts* if possible.

Print (pp 310-311)

Sarubbi, D. J.; Leone-Bay, A.; Paton, D. R. Oral Drug Delivery Compositions Comprising Modified Amino Acids and Bioactive Peptides. U.S. Patent 5,792,451, August 11, 1998; *SciFinder Scholar* 1998:542693.

Electronic patent from government web site (based on pp 310-311, 320-321)

Sarubbi, D. J.; Leone-Bay, A.; Paton, D. R. Oral Drug Delivery Compositions Comprising Modified Amino Acids and Bioactive Peptides. U.S. Patent 5,792,451, August 11, 1998. United States Patent and Trademark Office Web site. http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=5,958,879.PN.&OS=PN/5,958,879&RS=PN/5,958,879 (accessed Mar 23, 2007); *SciFinder Scholar* 1998:542693.

Electronic patent from non-government web site (based on pp 310-311, 320-321)

Sarubbi, D. J.; Leone-Bay, A.; Paton, D. R. Oral Drug Delivery Compositions Comprising Modified Amino Acids and Bioactive Peptides. U.S. Patent 5,792,451, August 11, 1998. http://www.pat2pdf.org/patents/pat5792451.pdf (accessed Apr 2, 2007); *SciFinder Scholar* 1998:542693.

SCIFINDER SCHOLAR AND OTHER INDEXES

An author may need to cite an abstract from a source rather than the original document. When citing indexes like *SciFinder Scholar* or *PubMed*, the citation to the original publication follows the format for that type of publication (journal articles, patents, books, etc.) and is followed by the citation to the abstract.

Abstract from a print index (pp 298-299)

Ferch, H. *Plastics, Paint Rubber* **1966,** *10*, 85-86; *Chem. Abstr.,* **1966**, 17198g.

Abstract from electronic indexes (based on print format and pp 298-299, 318-319)

Beharry, S.; Bragg, P. D. *J. Bioenerg. Biomembr.* **2001**, *33*, 35-42; *PubMed* PMID=1146092. http://www.ncbi.nlm.nih.gov/PubMed/ (accessed July 16, 2006).

Babu, V. R.; Sarath, P. S.; Karanth, N. G.; Kumar, M. A.; Thakur, M. S. *Anal. Chim. Acta* **2007,** *582* (2), 329-334; *SciFinder Scholar* AN=2006:1359559 (accessed Apr 2, 2007).

WEB SITES

Examples on pp 320-321 of the *ACS Style Guide*. Also see the "DATASETS" section of this Quick Guide.

Penn State Department of Chemistry. http://www.chem.psu.edu/ (accessed June 7, 2010).

Mallet Chemistry Library, University of Texas Libraries. ThermoDex Home Page: An Index of Selected Thermodynamic and Physical Property Resources. http://www.lib.utexas.edu/thermodex/ (accessed Mar 19, 2007).

NOTES

Journal abbreviations

Chemists use standard abbreviations for journal titles and the names of conference proceedings. These are published in *CASSI*, the *Chemical Abstracts Service Source Index*.

Personal names

Personal names often cause difficulties when preparing bibliographies or reference lists. Many western European names are arranged with the given name first and the family name last, so that in a bibliography the family name would come first, followed by a comma and then the given name (or initial).

Not all western European names follow this pattern, and names of authors from other parts of the world certainly do not. The *Chicago Manual of Style* has an excellent discussion of the rules for personal names (sections 8.5-8.20) and alphabetizing (sections 18.69-18.87).

RESOURCE LIST

The ACS Style Guide: Effective Communication of Scientific Information, 3rd ed. Coghill, A.M.; Garson, L.R., Eds. American Chemical Society: Washington, DC; Oxford University Press: Oxford, U.K., New York, 2006. (Chapter 14 is available online at http://pubs.acs.org/userimages/ContentEditor/1246030496632/chapter14.pdf).

CASSI—Chemical Abstracts Service Source Index: 1907-1999 Cumulative. Chemical Abstracts Service: Columbus, OH, 2000 (and supplements). (A basic online version of CASSI is available at http://cassi.cas.org/search.jsp; another good source for journal abbreviations is http://www.library.ubc.ca/scieng/coden.html).

The Chicago Manual of Style, 15th ed.; University of Chicago Press: Chicago, IL, 2003.

This publication is available in alternative media on request.

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