

GUIDELINES FOR LITERATURE REFERENCES IN THE DEPARTMENT OF  
CHEMICAL ENGINEERING AT THE UNIVERSITY OF UTAH

In all written work submitted by students in the Department of Chemical Engineering at the University of Utah, including lab reports, progress reports, design reports, theses, proposals, and any other kind of written work, students must use **one** of the following **two** systems of citing literature. You **MUST** learn BOTH methods! If literature is cited some other way, the written work will be rejected or have the grade reduced.

**There is no good reason for not getting literature references right. All it takes is patient copying of the formats shown here.**

**Method 1**

This is the method used by most "practical" journals, including *Chemical Engineering Progress*, and in all textbooks and most industrial and government reports. It is described at the right in an excerpt from an old *AICHE Style Guide*.

**Literature Cited**

Works in bibliography should be arranged in the order of citation in the article and should be numbered. The abbreviated titles of periodicals should be those used in *Chemical Abstracts*.

A full first name or at least two initials should be given for each author. Writers are cautioned to give complete information about books and authors and to check spelling and dates carefully before a manuscript is submitted.

In the sample bibliography, Figure 1, examples of entries for books (2), articles in periodicals (1, 8, 10, 12, 13, 14, and 15), theses (4), patents (6), speeches (5), and communications (7) are given, as well as examples of entries for works with more than one author (7, 14), entries in succession for two works by the same author (10, 11), two entries in succession for the same work (2, 3), anonymous entries (13), and entries for foreign articles and translations (12, 15).

The sample bibliography to accompany the above description is shown at the right.

### Literature Cited

1. Marshall, W. R., Jr., and W. M. Herring, Jr., *AIChE J.*, 1, 200 (1955).
- 2 McCabe, W. L., "Crystallization," in *Chemical Engineers' Handbook*, Perry, J. H., Editor, 3 ed., p. 1030, McGraw-Hill, New York (1950).
3. *Ibid.*, 206.
4. Smith, John, Ph.D. thesis, Mass. Inst. Technol. (1955).
5. Green, John, speech at the Centennial of Engineering, Chicago (December, 1952).
6. Jones, C.D., U.S. Patent 0,000,000 (1943).
7. Benedict, Manson, private communication.
8. Piret, E. L., and H. S. Isbin, *Chem. Eng. Progr.*, 50, 305 (1954).
9. Harmer, D. E., L. C. Anderson, and J. J. Martin, *Chem. Eng. Progr. Symposium Ser. No. 11*, 50, 253 (1954).
10. Lapple, C. E., *Chem. Eng. Progr.*, 50, 283, (1954)
11. \_\_\_\_\_, *Heating, Piping, Air Conditioning*, 17, 611 (1954).
12. Haenlein, Adolf, *Forsch. Gebiete Ingenieurw, Forschungsheft*, 2, 139 (1931); trans.: *Natl. Advisory Comm. Aeronaut., Tech. Mem. 659* (1932).
13. Anon., *Phys. Rev.*, 23, 934 (1918).
14. Benedict, Manson, *Chem. Eng. Progr.*, 51, 53 (1955).
15. Larcombe, H. L. M., *Chem. Age (London)*, 57, 563 (1947).

Fig. 1. Sample bibliography

As an example of its use, see the adjacent few paragraphs from a recent *CEP*. The reference marks are (1), (2) and (3).

Furthermore, the gap between the average cost per kilowatt-hour for industrial customers and for residential and small light and power use in decreasing (1).

In December, 1975, the average price received by major interstate pipelines for natural gas sold for resale was \$0.7963/1,000 cu.ft., an increase of 17% from December, 1974 (2). The major interstate pipelines purchased natural gas at a price of \$0.4595/1,000 cu.ft. in December, 1975-28% more than they paid in December, 1974.

For the period July-December, 1975, new contracts for intrastate natural gas called for an average price of \$1.289/1,000 cu.ft. (3). The average prices....

## Method 2

This second method is widely used in "research" journals, e.g., the *AICHE Journal*. It is described by the paragraph at the right from the "Instructions to Authors" section of the *AICHE Journal*, and an example from an *AICHE Journal* is given.

## Literature Cited

References should be listed on a separate sheet in alphabetical order according to author, patentee, or editor. Give complete information with the title of the paper, patent, report, etc. References should be cited in the text by the last name of the author (both authors when only two, first author and et al. when more than two) and year. Use the journal abbreviations preferred by *Chemical Abstracts*. Do not number references.

### Example

The stable secondary flow which exists in incompressible laminar flow through curved tubes provides a potentially useful mechanism for increasing transport rates to the boundary relative to straight tubes. The coiled tube has been suggested as a useful geometry for certain chemical reactors by Koutsky and Adler (1964) because axial mixing is limited by the transverse flow (Erdogan and Chatwin, 1967; McConalogue, 1970; Nunge et al., 1972), and for reverse osmosis by Srinivasan and Tien (1971) and Nunge and Adams (1973), because concentration polarization is reduced. Furthermore, flow through porous media at Reynolds numbers above the Darcy regime has been suggested by Wright (1968) and Jones (1968) to have characteristics similar to those in curved tubes.

The first few references for the above article are shown at the right.

#### Literature Cited

Austin, L. R., and J. D. Seader, "Fully Developed Viscous Flow in Coiled Circular Pipes," *AIChE J.*, 19, 85 (1973).

Erdogan, M. E., and P. C. Chatwin, "The Effects of Curvature and Buoyancy on the Laminar Dispersion of Solute in a Horizontal Tube," *J. Fluid Mech.*, 29, 465 (1967).

Ito, H., "Laminar Flow in Curved Pipes," *ZAMM*, 49 653 (1969).

Jones, W. M., "Viscous Drag and Secondary Flow in Granular Beds," *Brit. J. Appl. Phys. (J Phys. D.)*, 1, 1559 (1968).

Koutsky, J. A., and R. J. Adler, "Minimization of Axial Dispersion by Use of Secondary Flow in Helical Tubes," *Can. J. Chem. Engrs.*, 42, 239 (1964).

Lin, T.-S., "Laminar Convective Transport Processes in Strongly Curved Tubes," Ph.D. dissertation, Clarkson College of Technology, Potsdam, N. Y. (1972).

Notice that in the example of Method 2 the titles of articles are included, while in the example of Method 1 the titles are not included. We require that the titles of all articles be included in each reference, whether you use Method 1 or Method 2.

The titles of books and journals are given in italics. If your word processor can type italics, then type the book and journal titles (or abbreviations) in italics. If not, type them in ordinary type underlined, which is the equivalent of italics.

Regardless of which of these two systems you elect to use, you must prepare the list of bibliographical references using "standard bibliographical style." The section from the *AIChE Style Manual* gives several rules. If there is any serious doubt about how to reference some unusual source, consult Janet S. Dodd (Ed) *The ACS Style Guide; A Manual for Authors and Editors*, American Chemical Society, Washington DC, 1986.

Most laboratory reports will cite "Perry's." You paid a lot for it, so you should use and cite it! Most students cite it incorrectly. It is a book with signed chapters, for which the correct citation is shown on page 5, beginning with the name of the author of the chapter; e.g., Seader, J. D. . . . .The first five editions of this book were titled *Chemical Engineers' Handbook*; the sixth edition is titled *Perry's Chemical Engineers' Handbook*.

## EXAMPLES OF REFERENCE CITATIONS

### BOOKS

#### Individual author

Babbitt, Harold E. *Engineering in Public Health*, McGraw-Hill, New York (1952).

#### Two or three authors and edition

Ehlers, V. M., and Steel, E. W. *Municipal and Rural Sanitation*, 4th ed. McGraw-Hill, New York (1958).

#### Book with subtitle. More than three authors

Ordway, Frederick I., *et al* *Applied Astronautics: An Introduction to Space Flight*, Prentice-Hall, Englewood Cliffs. N. J. (1963).

#### Corporate author

American Public Works Association. *Sewage Service Charges in Cities over 5,000 Population*, Chicago (1953).

Federal Construction Council *Underground Corrosion, Cathodic Protection and Required Field Measurements*. Symposium-Workshop Report No. 1. National Academy of Sciences—National Research Council Publication 991. Washington, D. C.: 1962.

#### Encyclopedia reference

"Coupled Circuits." *McGraw-Hill Encyclopedia of Science and Technology*, 3:521-524 McGraw-Hill, New York (1960).

#### Section by one author in a publication by another author

Seader, J. D. and Z. M. Kurtyka, "Distillation" in *Perry's Chemical Engineer's Handbook*, 6th Edition, D. W. Green and J. O. Maloney Eds.p 13-1, McGraw-Hill, New York (1984).

### PERIODICALS, JOURNALS, AND OTHER SERIALS

#### Article in weekly Periodical with each issue Page separately

Davis, Raymond E. "What You Should Know About Pozzolans." *Engineering News-Record*. 146:37-40 (April 5, 1951).

Article in society journal and continuous paging

Holman, J. P. "The Mechanism of Sound Field Effects on Heat Transfer." *Journal of Heat Transfer, Trans.. A. S. M. E., Series C.* 82:393-396 (1960).

Anonymous article

"Say Goodby to Summer," *The Utah Alumnus*, 15: 75-80 (July 1963).

Article in periodical issued in more than one series

Ruedak, F., "On the Change of Flow During Plastic Deformation in Rocksalt," *Philosophical Magazine, Ser. 8*, 8:29-42 (1963).

Periodical article issued in sections

Stedman, D. F., "Stress-strain Curves for Fatigued Rubber," *Canadian Journal of Research, Section F*, 28:31-49 (1950).

Original article not examined

Fauske, Hans K., and Min, Tony C., "A Study of the Flow of Saturated Freon-11 through Apertures and Short Tubes." U. S. Atomic Energy Commission Report ANL-6667. Original article not examined. Abstracted in *Nuclear Science Abstracts*, 17:1283 (1961).

Translation

Rodionov, K. P., "Certain Thermodynamic Properties of a Solid Under High Pressures," U. S. Office of Technical Services Report 62-11620. Trans. of *Zhurnal Tekhnicheskoi Fiziki, (U.S.S.R.)* 26:375-378 (1956).

Conference proceedings

McCallum, G. E., "Tomorrow's Challenge in Water Pollution Control," *Proceedings of the 14th Industrial Waste Conference*, Purdue University Engineering Extension Series No. 104 (1959).

Monograph in series issued by an institution

Kupchik, F. J., and Edwards, G. P., *Uric Acid as a Measure of Water Pollution*. New York University: Department of Civil Engineering. Civil Engineering Series No. 103 (1962).

### Section of symposium of proceedings

David, Raymond E., "A Review of Pozzolanic Materials and their Use in Concrete," *Symposium on Use of Pozzolanic Materials in Mortars and Concretes*, A.S.T.M. Spec. Tech. Pub. No. 99 (1949).

### Experiment station publications

Israelsen, O. W., and Clyde, G. D., *A Report of Utah Lake and Jordan River Irrigation Studies*, Utah Agricultural Experiment Station Report 151, Logan, Utah (1936).

Jenike, A. W., *Gravity Flow of Bulk Solids*, Utah Engineering Experiment Station Bulletin 108. Salt Lake City (1961).

### ELECTRONIC MEDIA

The following examples of references to electronic media are gleaned from Nicholas J. Higham, *Handbook of Writing for the Mathematical Sciences*, 2nd ed., Society for Industrial and Applied Mathematics, Philadelphia, PA (1998) ISBN 0-89871-420-6. I have modified them slightly to be consistent with the styles above.

#### A publication available in print and online

Higham, Nicolas J., *The Test Matrix Toolbox for MATLAB* (version 3.0), Numerical Analysis Report No. 276, Manchester Center for Computational Mathematics, Manchester, England (Sept. 1995); also available from <ftp://ftp.ma.man.ac.uk/pub/narep/narep276.ps.gz>.

#### A publication available online only

Page, Melvin E., *A Brief Citation Guide for Internet Sources in History and the Humanities* (version 2.1), <http://h-net.msu.edu/~africa/citation.html> (1996).

#### A publication on CD-ROM

Anderson, A. G., "Immersed Interface Methods for the Compressible Equations," *Proceedings of the Eighth SIAM Conference on Parallel Processing for Scientific Computing* (Minneapolis, MN, 1997), CD-ROM, Society of Industrial and Applied Mathematics, Philadelphia, PA (1997).

#### A piece of software

van Oostrum, Piet. LATEX package fancyhdr. CTAN archive (e.g., <http://www.tex.ac.uk/tex-archive>), macros/latex/contrib/supported/fancyhdr.

An item in a discussion group or newsgroup

Hough, David, "Random Story," *NA Digest*, 89 (1) (1989). na.help@na-net.ornl.gov, <http://www.netlib.org/index.html>.

An email message. The title is taken from the subject line.

Higham, J. Desmond (aas96106@ccsun.strath.ac.uk). "Comments on your paper." Email message to Nicholas J. Higham (higham@ma.man.ac.uk), August 18, 1997.

A forwarded email

Ciambrano, Susan (ciabran@siam.org). "Reader's comments on HWMS." (Original message A. Reader, Handbook of Writing.) Forwarded email message to Nicholas J. Higham (higham@ma.man.ac.uk), October 20, 1995.

A FEW ADDITIONAL POINTS

1. In the "Literature Cited" on page 1, the third item listed is "3. *ibid.*, 206." *Ibid* is the abbreviation for *ibidem* meaning in the same place; for example:

(1) Doe, C. C., *J. Amer. Chem. Soc.*, 72, 1200 (1950).

(2) Roe, A. B., *ibid.*, 75, 500 (1953).

2. The usage of names of multi-author books and articles is a bit confusing. In Method 2, if a book or article has three or more authors, then it would appear in the reference in the text as (Smith *et al.*, 1972), while in the Literature Cited it would be Smith, A. B., C. J. Jones, and E. F. Green, *Title*... However, if there are four or more authors, then it would appear in the text as above and in the Literature Cited as Smith, A. B., *et al.*, *Title*.

3. If you use system No. 2, the year, which is the last thing to appear, must be in parentheses. And if one author has more than one article in a single year, the years should be followed by lower-case letters (1981a); and the reference in the text should also show the year with the small letter following.

4. In both examples, when the same author is listed for two articles, a blank is used to in place of the author's name (e.g., Reference 11 in the first example). This is permitted but not required; one may repeat the author's name if he wishes.

5. The year of publication of journal articles, books, etc., appears in parentheses.