American Mineralogist, Volume 72, pages 1043–1049, 1987

Guidelines for authors[1]

Revised June 1987

Purpose of these guidelines

Costs of printing and volume of material submitted to *The American Mineralogist* continue to increase, thus mandating measures to conserve space and money in order to minimize page charges and dues. These guidelines have been prepared with these goals in mind; their use makes the preparation of manuscripts for publication more rapid in that they encourage standardization of certain aspects of communication [e.g., similar usage of units, adherence to agreed-upon procedures such as those established by the International Mineralogical Association (IMA)] without constraining authors to inflexible writing styles. Following these guidelines and any revisions listed on the inside back cover of subsequent issues of the journal is likely to reduce time spent during manuscript revision and will help assure rapid publication at reasonable cost.

Introduction

The American Mineralogist, the journal of the Mineralogical Society of America (MSA), publishes the results of original scientific research in the general fields of mineralogy, crystallography, and petrology. Manuscripts are judged on the basis of significance, originality, appropriateness of subject matter, and clarity of presentation. The decision regarding acceptance or rejection of a manuscript is the responsibility of the editor and is based in large part on the recommendations of associate editors and reviewers. Membership in MSA is not a prerequisite for publication in *The American Mineralogist.*

Authors are reminded that the journal has limited space and that publication costs are heavy. Authors are therefore urged to write as concisely as possible and to avoid repetition and unnecessary detail. Overlong manuscripts (more than 50 double-spaced pages, including references, figures, and tables) may require special arrangements prior to consideration for publication. A prospective contributor should study these guidelines and examine recent issues of *The American Mineralogist* to become familiar with the style and requirements of the journal. The limitations set by page size and layout should be particularly noted.

A letter of transmittal, including a statement that the manuscript has not been previously published, wholly or in part, must accompany the manuscript. Also, although reviewers are selected by the associate editor, authors should feel free to supply in the transmittal letter the names and addresses of persons outside their own institution who they think would be qualified reviewers. Authors are *strongly* advised to have their manuscripts reviewed by colleagues before submission; the letter of transmittal should include the names of those colleagues.

Three copies of the manuscript must be submitted in English. Before submission, authors for whom English is not a native language *must* have the manuscript reviewed by a colleague for whom English is a native language. Failure to do so will delay the review process and, in some cases, may be grounds for rejection.

Page charges and reprints

Authors are requested to pay page charges of $50 per printed page, although current publication costs are higher than that amount. Payment of page charges is not a condition of acceptance of a manuscript for publication; however, MSA depends largely on the revenue generated from page charges and reprint orders to keep membership costs low. For this reason, authors are asked to make every effort to obtain funds for page charges or reprints from their granting agency or institution. Authors who pay $50 per printed page will receive 100 reprints (without covers). Authors who cannot pay page charges may purchase reprints. First authors who are MSA members and who cannot pay page charges or purchase reprints are entitled to a *small* number of reprints as a benefit of membership. Authors of memorials, review papers, and official MSA presentations are exempt from page charges and will receive 100 free reprints.

A form with the page-charge order and billing instructions accompanies page proofs and must be returned to the MSA Business Office at the same time page proofs are returned to the Editorial Office; any purchase order forms required by the author's institution may be sent at a later time to the MSA Business Office at 1625 I Street, N.W., Suite 414, Washington, D.C. 20006, U.S.A.

Mineral nomenclature

New mineral names and redefinitions of existing names must be approved by the Commission on New Minerals of the International Mineralogical Association (Fleischer, 1970) before publication. For this purpose, a copy of the

[1] Copies are available from the Editorial Office, *The American Mineralogist,* Department of Geological Sciences, University of Colorado, Boulder, Colorado 80302-0250, U.S.A.

0003–004X/87/0910–1043$02.00

manuscript should also be sent to Dr. J. A. Mandarino, Chairman, Commission on New Minerals and Mineral Names, Royal Ontario Museum, 100 Queens Park, Toronto M5S 2C6, Canada. Authors must provide the Editorial Office with evidence of IMA approval of any new mineral names.

Writers naming new minerals must conform to the rules and principles set forth in Nickel and Mandarino (1987). The paper by the Commission on New Minerals and Mineral Names (1982) should be consulted for a suggested outline for new-mineral descriptions. The abstract of a new-mineral description should completely list the properties of the mineral in a manner consistent with the "New Mineral Names" section of the journal. The paper by Nickel and Mandarino (1987) gives more information on procedures. Additional information is given by Dunn (1977). Naming of regular interstratifications of clay minerals is discussed by Bailey (1982).

In general, manuscripts proposing new names for imperfectly or incompletely described minerals cannot be accepted.

Obsolete, discredited, or superfluous mineral names may not be used. A helpful guide is *Glossary of Mineral Names* (Fleischer, 1987). This glossary is taken as the standard for the spelling of mineral names. Use of element symbols as prefixes to the approved name of a mineral (e.g., Mg-chlorite, Cr-diopside) should be avoided, unless specifically approved by the IMA. A list of discredited mineral names and examples of acceptable and unacceptable usages of mineral names appear in Nickel and Mandarino (1987).

Crystallographic data

For crystallographic data, the recommendations of the Commission on Crystallographic Data of the International Union of Crystallography (Kennard et al., 1967) are standard in this journal. X-ray powder-diffraction data may be tabulated if necessary to characterize the mineral. If such data are similar to data already published or listed in the Powder Diffraction File (PDF), then a statement to that effect is sufficient. Improvements to previously available powder data can be contributed directly to the PDF without publication.[2] Powder patterns should be indexed whenever possible, and unit-cell parameters should be listed; if these procedures cannot be followed, the reasons should be stated. If the space group is known or determined, a powder pattern whose extinctions are inconsistent with the space group should not be published without explanation of the inconsistent extinctions.

Meteorite nomenclature

New meteorite names must be approved by the Nomenclature Committee of the Meteoritical Society [Dr. A. L. Graham, Secretary, British Museum (Natural History), Cromwell Road, London, SW7 5BD, U.K.]. Other meteorite names must conform to the spelling given in the *Catalogue of Meteorites* (4th edition) by Graham et al. (1985) or in subsequent numbers of the *Meteoritical Bulletin* (published in *Meteoritics*).

Format of manuscript

Appendix 1 of these guidelines contains a checklist for manuscript preparation. Some format guidelines are detailed in this section as well.

The parts of the manuscript should appear in the order given here. All pages must be numbered, and only one side of each sheet may be used. No separate listing of table titles is needed, nor is there a need to begin each main section on a new sheet of paper (although one or two lines of extra space before and after a new heading are helpful) Figures and tables should be mentioned in numerical order in the text.

The increased application of computer systems for information retrieval requires that both title and abstract be as brief as possible. Authors should avoid complex symbols in titles. To facilitate identification in indexing and abstracting, it is recommended that authors spell out one of their given names rather than precede surnames with initials only.

1. Title

The title and any subtitle should be typed with the first word (preferably not an article) and all proper names capitalized. Other words are lower case. Underlining or italics is unnecessary, except for mathematical symbols, etc.

2. Name(s) and address(es) of author(s)

Name(s) should be typed in all capital letters; address(es) should be typed below their respective names with only initial letters capitalized and without underlining or italics. Space is saved if all authors at a given address can be grouped together, but this procedure is not mandatory.

3. Abstract

The abstract should state concisely in no more than 250 words what was done and what was concluded; if possible the abstract should include important numbers (e.g., temperature range, main X-ray lines, thermodynamic data). Literature citations should not appear in the abstract.

4. Text

Headings. Appropriate headings are used to break the text into sections. The first word and any proper names are capitalized; no underlining or italics should be used except for mathematical symbols, etc. Only three orders of headings may be used: main or first-order headings, second-order headings, and third-order headings, e.g., "Experimental techniques" (first-order; centered), "Hydrous experiments" (second-order; on a line by itself, flush left), and "Control and calculation of H_2O contents of

[2] Address: Editor, Powder Diffraction File, Mary E. Mrose, National Bureau of Standards, A209, 223 MATLS, Gaithersburg, MD 20899, U.S.A. Standard forms for reporting data may be obtained from W. F. McClune, Joint Committee on Powder Diffraction Standards, 1601 Park Lane, Swarthmore, Pennsylvania 19081, U.S.A.

experimentally produced melts" (third-order; after a paragraph indention and followed by a period). Further insight on headings and heading order may often be gained by consulting a paper on a similar subject in a recent issue of the journal. The heading style used in these guidelines is consistent with that in the journal.

Usage. American spelling and usage according to *The American Heritage Dictionary* and/or *Webster's Third New International Dictionary of the English Language* are standard in the journal. The usage notes in the former are especially helpful. To promote clarity, *The American Mineralogist* follows the recommendations of *The Chicago Manual of Style,* including those regarding capitalization, hyphenation of unit modifiers (e.g., unit-cell dimensions), and commas in series. SI units are treated as described in ASTM Publication E 380-85 (*Standards for Metric Practice*); measurements involving SI units that are grammatically used as unit modifiers before a noun are also hyphenated (e.g., 1.0-nm spacing). Table 1 lists most of the units currently used in the journal. Presentation of mathematical equations is patterned after *Mathematics into Type* (Swanson, 1979). The journal also follows the recommendations of the IMA regarding correct use of mineral names (detailed in the references in the section of these guidelines on mineral nomenclature).

Other sources for assistance. For questions on organization, writing style, and usage not covered in these guidelines, answers can usually be found by examining a paper in the same field in a recent issue of the journal. Helpful discussions of the preparation of manuscripts are found in *How to Write and Publish a Scientific Paper* (Day, 1983) and *Suggestions to Authors* (U.S. Geological Survey, 1978; out of print, but a new edition is expected in 1988). The recommendations in these books may smooth the path to publication.

Italics and boldface. Examples of symbols that should be italicized are listed in Table 1. Symbols for vectors should be underlined with a wavy line to indicate boldface. Numbers, Greek letters, and superscripts and subscripts that are mere labels (i.e., are not themselves variables) are not italicized. Polytypes are italicized, but site labels are roman (e.g., muscovite-$2M_1$, but M1 site).

It is most helpful if authors indicate (by underlining) where italics are required for crystallographic axes and polytypes, mathematical variables, etc. Greek letters are automatically printed in an italic (i.e., slanted) fashion and so should not be underlined. Any symbol that may be difficult to interpret should be explained in a penciled note in the margin. Many items formerly typeset in italics are now typeset in roman, however (e.g., et al.), and a check of a recent issue may prevent unnecessary underlining that must be deleted by the Editorial Office.

Chemical and mathematical notation. As many levels of superscripts and/or subscripts as will be needed are available; complex notation should be explained to the Editorial Office in a letter or marginal note so that the manuscript can be correctly marked for typesetting. It would be helpful if sections of text with much complex notation were triple spaced, because insertion of many computer codes is necessary to achieve the correct typeset result.

It is cheaper to typeset simple reactions, equilibria, and mathematical equations as part of the running text rather than as a display. Therefore, if these items do not need to be referred to later by a number, they should be incorporated into the text, as, for example, $y = mx + b$. If mineral names must be centered under reactants and products or if a space-consuming fraction is involved, however, the item should be set off as a display (i.e., placed on a separate line by itself).

TABLE 1. Units (never italics) and symbols (usually italics)

Length (*l*) (indicate italic letters by underlining in typescript)
- m = meter(s)
- cm = centimeter(s) (1 cm = 10^{-2} m)
- mm = millimeter(s) (1 mm = 10^{-3} m)
- μm = micrometer(s) (1 μm = 10^{-6} m) (*not* micron or μ)
- nm = nanometer(s) (1 nm = 10^{-9} m)
- Å = ångström(s) (1 Å = 10^{-10} m)
- pm = picometer(s) (1 pm = 10^{-12} m)
- in. = inch(es) (not recommended)

Volume (*V*)
- L = liter(s) (1 L = 1000 cm^3 = 10^{-3} m^3)
- mL = milliliter(s); cm^3 = cubic centimeter(s) (*not* cc)
- $Å^3$ = cubic ångström(s)

Mass (*m*)
- g = gram(s); kg = kilogram(s); mg = milligram(s); μg = microgram(s)

Density (*D* or ρ)
- g/cm^3 = gram(s) per cubic centimeter

Concentration (indicate with square brackets [ ] around chemical symbol, e.g., $[Cl^{1-}]$)
- % = percent; ‰ = per mill (use the symbol with numbers, but spell out for relative amounts)
- wt% = weight percent; mol% = mole percent; vol% = volume percent
- *M* = molar concentration (1*M* = 1 mol/L)
- *m* = molal concentration (1*m* = 1 mol/kg)
- ppm = parts per million; ppb = parts per billion

Time (*t*)
- s = second(s); min = minute(s); h = hour(s); d = day(s); yr = year(s)
- Ma = million years; Ga = billion years (ago or date)
- m.y. = million years; b.y. = billion years (duration)

Pressure (*P*)
- Pa = pascal(s) (1 Pa = 10^{-5} bars)
- kPa = kilopascal(s); MPa = megapascal(s)
- GPa = gigapascal(s) (1 GPa = 10 kbar)
- bar or bars (no abbreviation)
- kbar = kilobar(s)
- atm = atmosphere(s) (not recommended)

Temperature (*T*)
- K = kelvin(s)
- °C = degrees Celsius

Frequency (*f* or ν)
- Hz = hertz (cycles per second)

Energy
- J = joule(s); kJ = kilojoule(s) (preferred)
- cal = calorie(s); kcal = kilocalorie(s)

Miller indices—note that letter symbols are italicized but numeric values are not, e.g., [*hkl*] but [100]
- *hkl* = diffraction symbol
- (*hkl*) = face symbol
- {*hkl*} = form symbol
- [*hkl*] = edge or zone symbol

Unit-cell measurements
- *a*, *b*, *c* = edge lengths; α, β, γ = angles
- **a**, **b**, **c** = vectors—note the boldface (indicate in typescript by placing a wavy underline under the letter)

Optical measurements: dispersion (*r*, *v*), extinction angle ($Z \wedge \mathbf{c}$), optic axial angle ($2V$, $2V_x$, $2V_z$), principal vibration directions (*E*, *O*; *X*, *Y*, *Z*), refractive indices (*n*; ε, ω; α, β, γ)

Other abbreviations (roman type): ca., about; cf., compare; e.g., for example; et al., and others; etc., and other things; i.e., that is; p., page or pages; vs., versus

Reactions, equilibria, and mathematical equations that are referred to subsequently are displayed and numbered sequentially by using a number in parentheses at the right margin. They should be referred to in the text as Equation 3, Reaction 4, or Equilibrium 5 (or—in parentheses, figure captions, or tables—as Eq. 3, Reaction 4, or Equilibrium 5). Reactions and equations are punctuated as part of the sentence; for example, the FMQ buffer reaction is

$$\underset{\text{fayalite}}{3Fe_2SiO_4} + O_2 = \underset{\text{magnetite}}{2Fe_3O_4} + \underset{\text{quartz}}{3SiO_2}.$$

Miscellaneous style points. Besides the units and symbols listed in Table 1, a few of the style points adopted by *The American Mineralogist* to promote consistency and clarity are mentioned here for easy reference. A sentence should not begin with an arabic number or a symbol (e.g., "The values for α-quartz" rather than beginning with "α-quartz values"). Decimal fractions are preferred over numbers with a slash (solidus) or horizontal rule, and a zero should precede the decimal point for values less than one, e.g., 0.25 rather than ¼ or .25. Ionic charge is indicated by a superscript plus sign or minus sign following the symbol of the element; for multiple charges, an arabic superscript numeral precedes the plus sign or minus sign, e.g., Na^+, Cl^-, Ca^{2+}, S^{2-}. For designation of crystallographic sites, the element symbol is preceded by a superscript capitalized roman numeral: ^{IV}Al.

Precision of measurement may be indicated as 1.781 ± 0.002, if 0.002 represents a subjective estimate of the measurement error. Where sufficient data permit calculation of the estimated standard deviation (esd), indicate it as 7.3012 esd 0.002. To save space, the shortened forms 7.3012(2) and 7.3012(11) indicate esd's of 0.0002 and 0.0011, respectively.

As a result of the proliferation of mineral abbreviations, several different abbreviations for a given mineral may be found in the same issue of the journal. Kretz (1983) has suggested a consistent set of abbreviations. These abbreviations are recommended for subscripts, superscripts, reactions, assemblages (connected with plus signs), figures, tables, and normative mineral symbols with subscript weight percentages; however, these abbreviations should not be used for mineral names that stand alone in the text.

5. Acknowledgments

The acknowledgments section should be brief. Authors are requested to double check grant numbers and spelling of personal and company names.

6. References cited

Scope. All references mentioned in the text, figures, tables, and other supporting parts of the manuscript must be in the reference list and vice versa; the accuracy of the references, including matching the author names and years in the text with those in the reference list, is the responsibility of the author. Any unpublished information, including papers in preparation or submitted but not yet accepted should be omitted from the reference list. These can be referred to in the text, with the person's name, "pers. comm." (or "unpub. ms." or "unpub. data"), and (optional) the year.

Style. All authors in the references must be listed as last name, comma, initials (an exception is that *exactly* repeated author names—all authors, not just the first one—in succeeding references are indicated by a dash). When an author does not have a middle initial, the first name may be spelled out to avoid confusion. However, if the last name is probably unique among workers in the field, only the initial of the first name is needed.

Journal titles must be spelled out in full. No parts of the reference are italicized, boldface, or underlined. Appendix 2 gives examples of the common types of references; the current issue of the journal will provide other examples.

References are cited in the text as follows: for one author, by the surname of the author and the year of publication; for two authors, by the surnames of both authors (connected by "and") and the year of publication; and for three or more authors, by the surname of the first author plus "et al." (in roman type, not italicized or underlined) and the year of publication. If the citation is completely parenthetical, a comma separates the author(s) from the year. If the name of the author is grammatically part of a sentence, the year is put in parentheses and no comma is used. Two references whose citations would be identical in the text are differentiated by adding a lower-case "a" and "b" after the year of publication in both the text and the reference list. When these references appear together in the text, the year should appear twice (e.g., Smith, 1987a, 1987b—not Smith, 1987a,b).

The reference list is arranged alphabetically by the surname of the first author. For multiple references to the same first author, the following approach results in a user-friendly list: (1) Multiple references with one author are given chronologically (oldest reference first). (2) Multiple two-author references with the same first and second authors are chronological; two-author references with different second authors are ordered alphabetically by the second author and then chronologically (oldest first). (3) Multiple references with the same first author and with three or more total authors are given in chronological order (oldest first).

7. Appendixes

Supplementary material may be made into one or more appendixes. Each must be titled and numbered, even if there is only one, e.g., "Appendix 1. Sample descriptions." Generally, appendixes are set in a smaller typesize to save space. They may also be placed in MSA's depository. Tables may form part or all of the appendix material; appendix tables are described in section 11.

8. Figure captions

Figure captions should be brief; they should not duplicate information in the figure. Each caption begins with a paragraph indention and the abbreviation "Fig." fol-

lowed by the figure number and a period. Multiple parts of figures may be indicated in any convenient way, such as (A) and (B), (a) and (b), (left) and (right), or (upper) and (lower). If letter designations are used for the parts, the figures should actually be labeled with those letters.

9. Footnotes

Footnotes, except those in tables, are generally discouraged in scientific writing; usually the material can be skillfully incorporated in the text. This approach simplifies the layout of the article, which saves money in the long run. Nevertheless, certain material does require a footnote; examples include present addresses, directions for obtaining depository tables (or figures) and computer programs, disclaimers regarding commercial product use by governmental agencies, etc. All footnotes should be indicated by a superscript number except those for present addresses, which carry an asterisk. All footnotes should be double spaced. The content for directions for obtaining depository tables is as follows: "A copy of Table *X* may be ordered as Document AM-*YY*-*ZZZ* from the Business Office, Mineralogical Society of America, 1625 I Street, N.W., Suite 414, Washington, D.C. 20006, U.S.A. Please remit $5.00 in advance for the microfiche." The Editorial Office will supply the *YY* and *ZZZ* values.

10. Tables

Tables in the text are typeset by the printer. Therefore, they must be double spaced, as computer-typesetting codes will be written on the manuscript copy. No particular typescript width or style of type is required. The table titles should be brief and typed with sentence-style capitalization directly at the top of their respective tables, followed by a double rule. The column headings (with appropriate units in parentheses) are followed by a single rule. Any headings that occur within the body and apply to a block of data should be centered. A rule goes at the end of the table, and another rule goes after the footnotes, if any.

No vertical or diagonal rules may be used in tables. Column headings must be upright, not turned sideways, as sideways headings require extra expense. Brackets to delineate groups of data may be used if necessary; the groups should be clearly marked on the manuscript copy.

Symbols (*, **, †, ‡, §, ‖) are used for table footnotes, instead of numbers, and may be neatly handwritten. (In the rare table with numerous footnotes, capital letters may be used instead of extensive doubling and tripling of symbols.) Put any general explanatory material as the first footnote (preceded by *Note:*). The current issue of the journal will provide examples of approaches to complex tables.

11. Appendix tables

Appendix tables for typesetting should be prepared as detailed in the section on tables.

Very long appendix tables may be prepared camera-ready. Appendix tables for camera-ready publication in *American Mineralogist* must be typed so that they can be reduced to fit in one column (8 cm or 3.15 in.) or two columns (16.4 cm or 6.5 in.). Except as noted below, the maximum length after reduction is 21.9 cm (8.6 in.). If a Letter Gothic typeface is used, the table can be reduced to one-half its original width without losing legibility. If a typeface that is smaller than Letter Gothic is used (i.e., the lower-case letters are <2 mm high), then the table can be reduced to only 70% of its original width. Therefore, the *maximum* original (before-reduction) table dimensions should be as shown in Table 2. The maximum length for two-column-wide tables is slightly longer than for one-column-wide tables because the space normally devoted to the page number and "running head" can be used if no text appears on the page.

TABLE 2. Sizes for camera-ready appendix tables (*before* reduction for printing)

	Letter Gothic		Smaller typeface	
	(cm)	(in.)	(cm)	(in.)
	One-column table			
Width	16	6.3	11.4	4.5
Length	43.8	17.2	31.3	12.25
	Two-column table			
Width	32.8	12.9	23.4	9.2
Length	45.1	17.75	32.2	12.7

To conserve space, appendix tables should be typed with single spacing (i.e., no space between lines) if at all possible. Half-line spacing or double spacing may be used if necessary because of superscripts and subscripts. Horizontal rules are the same as in typeset tables in the text. No vertical rules are used. Authors may request individual help in determining a workable size for such tables; however, the main constraints are the area of the journal page and the requirement that the height of the smallest letter, number, or symbol (after reduction to publication size) be no less than 1.1 mm. Appendix tables may also be placed in MSA's data depository.

FIGURES

As much as possible, figures should be prepared for reduction to one-column width. After reduction, the shortest letter or number on a figure should be ≥1.1 mm high, and, for the best appearance, none of the letters and numbers should be >3 mm high.

The section on figure captions explains how to deal with figures having multiple parts. If letter labels are needed, they must be placed on the figures (within the image area) before submission. For figures with multiple photographs, each photograph should be trimmed carefully with any unnecessary area removed (maintaining right-angle corners, however). The several photographs should then be mounted on a flexible backing paper. They should actually touch each other; the printer will overlay a fine white line during the printing process to separate the various parts (e.g., the photographs on p. 300, vol. 72, of *The American Mineralogist*).

Each figure must be marked with its number in such a

way that it is not damaged in the process. Ink from felt-tip pens may smear on the adjoining figure in the stack if the ink is not thoroughly dried. Ballpoint pens may indent the paper and mark the figure so that it is unusable. A safe method is writing on the back of the figure or in the corner on the front (*outside the image area*) with felt-tip pen, then allowing the ink to air-dry thoroughly. If there is any chance of smudging, the dry ink may be covered with clear tape.

If at all possible, about 2.5 cm (1 in.) of space should be left above each figure for insertion of printing instructions.

Copies of figures may be submitted for review purposes; originals or camera-ready glossies may be retained by the author until the revised manuscript is submitted to the associate editor or the editor calls for them.

Depository items

Tables and figures to be deposited at the Society's headquarters do not have to comply with the above guidelines; however, they must be no larger than 11 in. (28 cm) by 17 in. (43.2 cm).

Discussions and replies

Authors may submit brief discussions of papers already published. Such discussions should be written only to take issue with or to clarify matters of scientific content; anything of a personal nature will be removed by the editor or associate editor. Authors of an article under discussion will be invited to write a brief reply. Both discussions and replies are subject to review. The discussant and the replier have the opportunity to see each other's final manuscript in order to assure that only one round of discussions will appear in print.

Review papers

The journal may publish review papers on subjects of general interest from time to time. Such papers should not merely be a regurgitation of previously published data, but should serve to selectively assemble previously published information and to then analyze and reinterpret it in such a way that new insights are gained and science is advanced. In addition, duplication or condensation of articles in the *Reviews in Mineralogy* series is not generally appropriate for publication in *The American Mineralogist*.

Review papers are subject to the same review procedures as technical manuscripts. The author of a review paper will receive 100 free reprints, as review papers are considered to be a service to MSA.

Page proofs

Changes in proofs

Changes made at the page-proof stage are expensive and are discouraged. An author who makes extensive changes in text (such as rewriting passages or changing data on tables) will be billed for all lines that must be reset *and* all additional lines in the paragraph that must be reset as a result of the additions or deletions. Reshooting of figures because of an author's changes will also be charged to the author.

Returning page proofs

Authors will be advised of the month in which page proofs will arrive when their manuscript is accepted. If they expect to be away at that time, it is their responsibility to provide the Editorial Office with an alternative address to which the page proofs may be sent or to make other arrangements for the proofs to be checked and returned.

Authors have 7 days from the date that is stamped on the page proofs to return them to the Editorial Office. They should be returned to the Editorial Office by first class mail (allow 5 business days) or overnight mail, if necessary, in the United States, Mexico, and Canada. Return proofs promptly by air mail from other countries.

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Appendix 1. Checklist for manuscript preparation

- ☐ Three copies of the manuscript must be submitted to James L. Munoz, Editor, *The American Mineralogist*, Department of Geological Sciences, University of Colorado, Boulder, Colorado 80309-0250, U.S.A.
- ☐ The manuscript copies must be accompanied by a letter of transmittal stating that the manuscript has not been previously published, wholly or in part, and is not and will not be submitted elsewhere for publication while it is in review for *The American Mineralogist*.
- ☐ All material submitted for publication (including items on title page, references, appendixes, figure captions, footnotes, and tables) must be typed *double spaced* (i.e., one *full* line space—about 5 mm—between each line of text; one-half line space is insufficient for insertion of computer codes for typesetting). The only exceptions are (1) items to be deposited and (2) camera-ready appendix tables.
- ☐ All material must be submitted on one side only of standard-weight paper.
- ☐ All paragraphs must be indented at least four spaces.
- ☐ All figures and tables must be mentioned in numerical order in the text. Authors should make a *final* check that each figure, table, and equation number mentioned is correct, as the numbering scheme may be changed several times during manuscript preparation.
- ☐ Only English-language manuscripts are published in *The American Mineralogist*. Before submission, authors for whom English is not a native language *must* have their manuscript reviewed by a colleague for whom English is a native language.
- ☐ American spelling and usage are standard in the journal.
- ☐ Journal titles in the References cited section must be written out in full.
- ☐ There should not be any underlining or italics for any part of a reference; all parts are set in roman type.
- ☐ All authors' names in references are inverted. Book editors' names are not inverted, however.
- ☐ All references mentioned in the text, figures, tables, etc., must be listed in the References cited section and vice versa.
- ☐ Mathematical variables are set in italic type. A list of commonly used physical and mineralogical quantities and their appropriate units is in Table 1. Except for bars and kilobars, SI units are preferred.

Word-processed manuscripts

- ☐ Hyphenation at the ends of lines should be "turned off."
- ☐ No right justification or proportional spacing (ragged right and uniform spacing between words are much easier for the printer to typeset correctly).
- ☐ Whenever there is a choice, a larger type size is better, especially for superscripts and subscripts.
- ☐ Dot-matrix output, unless of high quality, may lead to errors in typesetting that will be charged to the author.

Appendix 2. Methods for listing various kinds of references

Journal articles or articles in serial publications

Eugster, H.P. (1986) Minerals in hot water. American Mineralogist, 71, 655–673.

Tuttle, O.F., and Bowen, N.L. (1958) Origin of granite in the light of experimental studies in the system $NaAlSi_3O_8$-$KAlSi_3O_8$-SiO_2-H_2O. Geological Society of America Memoir 74, 153 p.

Wenk, H.-R., Barber, D.J., and Reeder, R.J. (1983) Microstructures in carbonates. Mineralogical Society of America Reviews in Mineralogy, 11, 301–367.

Books

Klein, C., and Hurlbut, C.S., Jr. (1985) Manual of mineralogy (20th edition), 596 p. Wiley, New York.

Articles in books

Grover, J. (1977) Chemical mixing in multicomponent solutions: An introduction to the use of Margules and other thermodynamic excess functions to represent non-ideal behaviour. In D.G. Fraser, Ed., Thermodynamics in geology, p. 67–98. Reidel, Boston.

Abstracts (only use "abs." if the reference is not in an abstracts volume)

Kroll, H., and Ribbe, P.H. (1986) Quantitative estimates of strain in (semi-)coherent K- and Na-rich phases of perthitic alkali feldspars. International Mineralogical Association Abstracts with Program, 145.

Czamanske, G.K., Wooden, J.L., and Zientek, M.L. (1986) Pb isotopic data for plagioclase from the Stillwater Complex (abs.). EOS, 67, 1251.

Reference in press (= *accepted* for publication)

Pichavant, M. (1987) Effects of B and H_2O on liquidus phase relations in the haplogranite system at 1 kbar. American Mineralogist, 72, in press.

Report

Appleman, D.E., and Evans, H.T. (1973) Job 9214: Indexing and least-squares refinement of powder diffraction data. U.S. National Technical Information Service, Document PB 216 188.

Reference in language other than English

Nishimura, T., and Tozawa, K. (1978) On the solubility products of ferric, calcium and magnesium arsenates. Research Institute of Mineral Dressing and Metallurgy Bulletin (Tohoku University), 34, 20–26 (in Japanese).

Secondary reference

Innocenti, M., Lattanzi, P., and Tanelli, G. (1984) Mineralogy and environment of formation of the Cu-Pb-Zn (Ag, Sb, As) mineralizations in the Niccioleta deposit. Rendiconti della Società Italiana di Mineralogia e Petrologia, 39, 657–667 (not seen; extracted from American Mineralogist, 71, 231, 1986).

Translation

Nogarko, L.N., and Gulyayeva, L.A. (1965) Geochemistry of the halogens in alkalic rocks of the Lovozero massif (Kola peninsula). Geochemistry International, 2, 729–740 (translated from Geokhimiya, no. 8, 1011–1024, 1965).

NOTICE

V. M. Goldschmidt Conference

The Mineralogical Society of America will co-sponsor a conference to mark the centenary of V. M. Goldschmidt's birth. The conference will be held at the Hunt Valley Inn, 25 km north of Baltimore, Maryland, from Wednesday, May 11, to Friday, May 13, 1988. Other sponsoring societies are the Geochemical Society, the European Association of Geochemistry, the International Association of Geochemistry and Cosmochemistry, and the Association of Exploration Geochemists. The Society of Environmental Geochemistry and Health is a participating society.

Technical sessions will consist of both oral and poster sessions. The deadline for contributed abstracts is December 18, 1987. Symposia on special topics in geochemistry include Eleventh Symposium of Geochemical Cycles; Paleoceanography; The Archean Environment; Ore-forming Processes; Geochemistry with Cosmogenic Isotopes; Environmental Geochemistry; Organic Geochemistry in Hydrocarbon Exploration; Origin and Diagenesis of Humic Substances, Coal, and Kerogen; Modern Concepts in Crystal Chemistry; Mantle Petrology and Mineralogy; and Geochemistry of Platinum Group Metals. The deadline for symposia abstracts is November 20, 1987. In addition to the technical sessions, seven one-day field trips have been scheduled.

For further information or to obtain abstract forms, contact the Goldschmidt Conference Coordinator, 410 Keller Building, The Pennsylvania State University, University Park, PA 16802, U.S.A.