# AMERICAN MINERALOGIST: INSTRUCTIONS TO AUTHORS

Revised January, 1971

The American Mineralogist is established by the Mineralogical Society of America to publish the results of original scientific research in the general fields of mineralogy, crystallography, and petrology, including such areas as: descriptive mineralogy and properties of minerals, experimental mineralogy and petrology, geochemistry, isotope mineralogy, mineralogical apparatus and techniques, mineral occurrences and deposits, paragenesis, petrography and petrogenesis, and topographical mineralogy.

## GENERAL REQUIREMENTS

1. Manuscripts including illustrations must be submitted in duplicate to the Editor, Prof. William T. Holser, Department of Geology, University of Oregon, Eugene, Oregon 97403 U.S.A. They must be typewritten, double-spaced (including references), with wide margins, on white paper about  $8\frac{1}{2}\times11$  inches in size; standard-weight paper must be used for the first copy. Xerox or other clear photocopy is satisfactory. Footnotes should be typed at the bottom of the page.

2. Only articles not previously published and not about to be published, wholly or in part, in either U. S. or foreign journals, will be considered. Authors should submit a statement affirming this requirement or explaining any overlap with previous or impending

publication.

- 3. New mineral names, before publication, should be approved by the Commlssion on New Mineral Names of the International Mineralogical Association (Fleischer, 1970) For this purpose a copy of the manuscript may be sent (either prior to or at the same time as submitted to this journal) to Dr. Michael Fleischer, U. S. Geological Survey, Washington, D. C. 20242. In general, manuscripts proposing new names for imperfectly or incompletely described minerals or new names for mere compositional varieties cannot be accepted. Writers naming new minerals should conform to the rules and principles set forth in Palache, Berman, and Frondel (1944, p. 42–47) and Hey, et al. (1961). The suggestions of Donnay and Fleischer (1970) for the description of new minerals are recommended.
- 4. For crystallographic data, the recommendations of the Commission on Crystallographic Data, International Union of Crystallography (Kennard, Speakman, and Donnay, 1967) and of the NAS-NRC Committee on Chemical Crystallography are standard in this journal; copies are available from the Editor of The American Mineralogist. Powder diffraction data (d or Q, not 20) may be tabulated if necessary to characterize the mineral. They may be illustrated only if essential features cannot be tabulated. If the data are similar to some already published or listed in the X-ray Powder Data File, then a statement to that effect is usually sufficient without republishing either a table or a cut. Refinements to previously available powder data can be contributed directly to the XRDF without publication. Powder patterns should be indexed, if at all possible, and cell parameters listed; if this is not possible 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 adequate discussion.

5. For thermal analysis data, the recommendations of a Committee on Standardization of the International Conference on Thermal Analysis (McAdie, 1967) are standard for this

journal; copies are available from the Editor.

- 6. Manuscripts that will print as 4 pages or less will be published as Mineralogical Notes, on the same schedule as major papers. In such a Note, a short form of reference is permitted. As an aid to abstracting journals, a brief abstract is required.
- <sup>1</sup> Address Dr. J. V. Smith, Editor, ASTM Joint Committee on Powder Diffraction Standards, Department of Geophysical Sciences, University of Chicago, Chicago, Ill. 60637.

## TITLE AND ABSTRACT

7. The increased application of computer systems for information retrieval requires that both title and abstract be as informative as possible, consistent with their respective lengths. Where feasible in the *title*, words should be substituted for chemical formulas, Greek letters, or other odd typography.

To facilitate identification in indexing and abstracting, it is recommended that the

authors spell out one of their given names.

8. The abstract should be informative, stating concisely what was done and what was concluded, and if possible including important numbers (e.g., temperature range, main X-ray lines, chemical composition). It should be no longer than necessary to convey this information, but in any case not longer than 200 words. The UNESCO guides for the preparation of scientific papers and abstracts (American Institute of Physics, 1968) are recommended; copies are available from the Editor.

#### STYLE

9. In general, style follows the American Institute of Physics Style Manual, or where particularly pertinent, those of the U.S. Geological Survey, the American Chemical Society, the Conference of Biological Editors, or Chandly, Barrett, and Batey (1954). The text must be written concisely; verbose or ungrammatical manuscripts will be returned.

10. Use consistent Système International (SI) units of the Metric System, with appropriate prefixes, italicize (by underlining in manuscript) symbols for physical quantities; use abbreviations without periods for units unless ambiguous. Where 0, 0, l, 1, Greek letters, or other typography is possibly ambiguous in the text, instruct the printer by writing in the margin; "zero", "oh", "el", "one", etc. A table of special symbols available at our press may be obtained from the Editor. Complicated subscripts and superscripts should be avoided; parenthetical designations can often be used, e.g., d(calc),  $G(O)_2$ ). Precision of measurement may be indicated in parentheses as 6.8001(3), rather than 6.8001  $\pm$ 0.0003.

#### TABLES

11. Each table should be typed on a separate page, with a title, and all tables collected at the end of the manuscript. Simple material, such as a single chemical analysis, is better run in the text than as a table. Keep rulings (especially vertical rulings) to the minimum consistent with clarity. Detailed explanation should be placed at the foot of the table or in

the text, not in the title. Reference footnotes with lower-case letters.

12. Tables can be most economically printed, by line cut, if they are submitted as clear, dark typescript or computer printout, or photo reductions of same. An extensive (printing to more than one page) table likely to interest only a few readers (e.g., individual hydrothermal runs, observed and calculated structure amplitudes, multiple chemical analyses), should be separated from the publishable manuscript and marked for deposit in the National Auxiliary Publications Service of the American Society for Information Science (formerly the American Documentation Institute). Material should be on labeled sheets that will be readable when reduced to  $8\frac{1}{2}\times11$  in. The material is deposited by the Editor and is then directly available to any reader as photocopy or microfiche, at a nominal fee. The author will be given 10 copies of the microfiche of the deposited material. Such tables may (but need not be) numbered, and must be referred to in the manuscript by a footnote such as the following:

A table listing results of equilibration runs may be ordered as NAPS Document from ASIS National Auxiliary Publications Service, c/o CCM Information Sciences, Inc., 22 West 34th St., New York, N. Y. 10001; remitting in advance \$2.00 for microfiche or \$5.00 for photocopies, payable to ASIS-NAPS.

### ILLUSTRATIONS

13. The principal criterion for accepting illustrations is the amount of important information they convey. The following types of illustrations can be replaced in most cases

by a short sentence in the text: location map, photograph of a massive mineral or a simply bedded outcrop, graph of a linear calibration, routine X-ray diffraction or differential thermal analysis results, previously published illustrations. On the other hand, a single line

drawing can often be substituted for an extensive table.

14. Illustrations, both photographs and line drawings, should be submitted as numbered glossy prints (in duplicate); original tracings or negatives are not needed. The prints should be reduced to between one and two times the approximate size at which they will appear, which in general is the minimum size consistent with the amount of information presented. The maximum printed width is  $4\frac{1}{4}$  inches; the maximum height (including legend) is 7 inches.

15. Lines less than 0.1 mm when reduced to published size, or lines that are not black enough, may be lost in reproduction. Shading reproduces badly; use stippling or cross hatching. Graph paper does not look well when reprinted: draft graphs with either no grid or a very open grid. Figures combining line cuts and half-tone reproductions of photographs are expensive to reproduce. On photomicrographs use a bar scale on the photograph

(not outside of it), instead of a magnification factor in the legend.

16. Do not insert illustrations in the text. All illustrations are figures. Individual parts may be grouped as one figure having a single legend, providing they do not extend beyond one page. Letter parts of the figure, neatly for reproduction, in the corner of (rather than below) each part. Supply numbered legends for all figures on a single separate sheet, including a general legend for any group figures.

#### REFERENCES

17. References should be placed alphabetically at the end of the article, not as footnotes, in the following style (notice punctuation):

Palache, Charles, and L. H. Bauer (1927) Cahnite, a new boro-arsenate of calcium from Franklin, New Jersey. *Amer. Mineral.* 12, 149–153.

CULLITY, B. D. (1959) Elements of X-ray Diffraction. Addison-Wesley Publishing Co., Inc.,

Reading, Massachusetts, 514 p.

Captur N. I. (1968) Dynamic deformation of quartz. In B. M. French and N. M. Short

CARTER, N. L. (1968) Dynamic deformation of quartz. In B. M. French and N. M. Short (eds.), Shock Metamorphism of Natural Materials. Mono Book Corp., Baltimore, p. 453-474.

Also acceptable for Mineralogical Notes is the following abbreviated style:

PALACHE, CHARLES, AND L. H. BAUER (1927) Amer. Mineral, 12, 149.

References should be cited in the text as (Palache and Bauer, 1927), not by number. Only references mentioned in the text should be listed.

18. Abbreviations of periodical titles follow the USA Standard. Such abbreviations can be seen in Access, or any recent issue of Chemical Abstracts. A list of citations for journals most often referred to in The American Mineralogist is available from the Editor.

19. References to unpublished material (manuscripts, reports, computer programs, personal communications, and the like) should be made in the text (or acknowledgments section) parenthetically or by footnote, rather than in the list of references. Specify the source person sufficiently so that he can be identified, for instance by his institution. A report qualifies as published, and may be included in the list of references if it is generally available to the world public. Reports from U. S. Government or Government-sponsored research are most generally available through the U. S. Department of Commerce Clearinghouse for Federal Scientific and Technical Information, and such a report should be referred by the CFSTI document number ("AD", "PB", etc.) as follows:

CHEN, R., AND A. HALPERIN (1965) On the measured frequency factors in thermolumines-

cence. U. S. Clearinghouse Fed. Sci. Tech. Inform. Doc. AD-621037.

A paper in manuscript qualifies for inclusion in the list of references if it has been accepted

for publication by a journal or publisher.

20. Reference to a presentation at a meeting should be to the published abstract (e.g., Geol. Soc. Amer. Spec. Pap.), if any. Translations, whether individual or from a cover-to-cover translation journal, should be referenced by the original source, followed by the translated source in brackets.

#### REPRINTS

Authors will be furnished 100 reprints free, without covers, provided page charges are honored. A form will be sent with the galley proof, on which the author receiving the proof should submit to the Editor an order for all additional reprints, consolidated from all authors. The MSA Office will bill later, according to the schedule shown on the form. The order must be returned with the proof; any purchase-order forms required by the author's institution may be sent later to the office of the Mineralogical Society of America, 2201 M Street, N.W., Washington, D. C. 20037.

#### PAGE CHARGES

Part of the publication cost will be billed, at the rate of \$20 per published page, to the institution sponsoring the research. A form will be sent with the galley proof, for the author to indicate where page charges are to be billed. A bill will not be sent if the author indicates that his sponsoring institution is unable to pay, and payment of page charges is *not* a condition for acceptance or for publication.

#### REFERENCES

- AMERICAN CHEMICAL SOCIETY (1967) Handbook for Authors. Amer. Chem. Soc., Washington, D.C.
- American Institute of Physics (1965) Style Manual, rev. ed. Amer. Inst. Phys., New York.
- ——ca. 1968. Guides for the Preparation of Scientific Papers and Abstracts. Amer. Inst. Phys., New York.
- CHANDY, T. W., P. R. BARRETT, AND CHARLES BATEY (1954) The Printing of Mathematics.

  Oxford Univ. Press, London.
- CONFERENCE OF BIOLOGICAL EDITORS (1964) Style Manual for Biological Journals. Amer. Inst. Biol. Sci. Washington, D. C.
- Donnay, Gabrielle, and Michael Fleischer (1970) Suggested outline for new mineral descriptions. *Amer. Mineral.* **55**, 1017–1019.
- FLEISCHER, MICHAEL (1970) Procedure of the International Mineralogical Association Commission on New Minerals and Mineral Names. *Amer. Mineral.* 55, 1016–1017.
- HEY, M. H., C. GUILLEMIN, F. PERMINGEAT, AND J. P. DE ROVER (1961) Sur la nomenclature minèralogique. *Bull. Soc. Franc. Mineral. Crystallogr.* **84**, 96–104.
- Kennard, O., J. C. Speakman, and J. D. H. Donnay (1967) Primary crystallographic data. *Acta Crystallogr.* 22, 445–449.
- MCADIE, H. G. (1967) Recommendations for reporting thermal analysis data. *Anal. Chem.* 39, 543.
- Palache, Charles, Harry Breman, and Clifford Frondel (1944) System of Mineralogy of ... Dana, 7th ed., 1, John Wiley and Sons, New York.
- U. S. GEOLOGICAL SURVEY (1964) Suggestions to Authors, rev. ed. U. S. Government Printing Office, Washington, D. C.

#### INTERNATIONAL SUMMER SCHOOL ON CRYSTAL GROWTH

Under the sponsorship of the International Union of Crystallography an International Summer School on Crystal Growth will be organized in the State University of Leiden, Netherlands, from 21 June to 2 July 1971.

The object of the Summer School is to give a general course on theory and practice of crystal growth to those who wish to specialize in this field and to those who have already entered this field but wish to broaden their knowledge. All courses will be given in the English language. Applicants should have a background, at least comparable to an M.Sc. in physics, chemistry or mineralogy, and should have sufficient knowledge of the English language.

The program consists of lectures on the following subjects: homogeneous nucleation

(Dr. S. Toschev, invited); thermodynamics of equilibrium and growth form, theory of crystal growth (Dr. A. A. Chernov, invited); morphology and structure (Dr. P. Hartman); heterogeneous nucleation (Dr. B. K. Chakraverty); epitactic layers, effects of foreign substances (Dr. A. A. Chernov, invited); transport reactions, hydrothermal growth (Dr. R. A. Laudise); melt growth, morphological stability (Prof. R. F. Sekerka); convection and segregation, industrial mass crystallization (Dr. M. A. van Damme—van Weele); perfection of crystals (Prof. A. R. Lang).

The registration fee is Hfl 300—. Application forms are obtainable till 1 February 1971 from: International Summer School on Crystal Growth, c/o Geologisch en Mineralogisch

Instituut der Rikjsuniversiteit, Garenmarkt 1 B, Leiden, Netherlands.

## INTERNATIONAL GEOLOGICAL CONGRESS

The Second Circular of the 24th International Geological Congress is now being prepared. Over 6900 geologists have mailed their application forms from the First Circular. If you have not . . . , you will not receive the Second Circular as the IGC computer does not have your name in its memory. Send your completed questionnaire Now to the Secretary General, 24th IGC, 601 Booth Street, Ottawa, Canada.

## SOCIETY FOR APPLIED SPECTROSCOPY

The 10th National Meeting of the Society for Applied Spectroscopy (Also the XXII Mid-America Symposium on Spectroscopy) will be held at Stouffer's Riverfront Inn in St. Louis, Missouri, Monday through Friday, October 18–22, 1971.

Original papers are invited for general sessions on spectroscopy (including X-ray, emission, atomic absorption, flame emission, atomic fluoresence, absorption, electron,

resonance, mass and nuclear) and gas chromatography.

Titles and abstracts (on 8-1/2"×11" paper and within an area of 6"×10") should be sent to Dr. E. F. Kaelble, program chairman, Monsanto Company, Inorganic Research Department, 800 North Lindbergh Blvd., St. Louis, Missouri 63166, by April 15, 1971.

## NEW JOURNAL: Isochron/West

The New Mexico State Bureau of Mines and Mineral Resources is sponsoring publication of a new periodical on isotopic age dating of rocks from the western United States. *Isochron/West* will be published at irregular intervals as age data become available. Initially, it is expected that three numbers will be issued per year, with contributions from Federal, state, and private laboratories working in this specialty.

Isochron/West is intended as a rapid means of communicating isotopic-dating information. Each issue will list isotopic and radiometric rock dates (except carbon-14)—almost all previously unpublished—with the necessary analytical and geological background information. The lists will be in a systematic format for convenient citation, recovery, and filing.

Isochron/West will be sold at a nominal subscription price to meet publication and distribution costs: \$3.00 for 5 issues. Isochron/West, Number 1, will be published in January 1971.

### AMERICAN MEN OF SCIENCE

Work on the 12th Edition of AMERICAN MEN OF SCIENCE has begun at the Jaques Cattell Press in Tempe, Arizona, with publication of the first volume of the set planned for mid-1971. The new edition will follow the general plan of the 11th edition, an alphabetical arrangement of biographies of scientists in the Physical and Biological Sci-

ences. The continued increase in the number of research scientists in these fields indicates that this edition will be even larger than the last edition.

The criteria of former editions will be followed:

- 1. Achievement, by reason of experience and training, of a stature in scientific work at least equivalent to that associated with the doctoral degree, coupled with presently concontinued activity in such work; or
- 2. Research activity of high quality in science as evidenced by publication in reputable scientific journals; or, for those whose work cannot be published because of governmental or commercial or industrial security, research activity of high quality in science as evidenced by the judgment of the individual's peers among his immediate co-workers; or
- 3. Attainment of a position of substantial responsibility requiring scientific training and experience of approximately the extent described for (1) and (2).

Nominations of names for consideration are currently being invited. Proposed names and addresses should be sent to: The Editors, American Men of Science, Jaques Cattell Press, P.O. Box 5001, Tempe, Arizona 85281.

#### MINERALOGICAL ABSTRACTS

The American Organizer for the production of abstracts for MINERALOGICAL ABSTRACTS, owned and published jointly by the Mineralogical Society of America and the Mineralogical Society of Great Britain, would be grateful for volunteer help in order to cover more fully the mineralogical and petrological literature of Mexico and South America. This literature deserves to be more widely known than it is at present, and if you read Spanish or Portuguese and have access to the journals, you can do a real service to mineralogy and to your country's publications. Write to the Organizer for America, Miss Marjoire Hooker, U. S. Geological Survey, Washington, D. C. 20242, U. S. A.

## PHYSICS AND CHEMISTRY OF ASBESTOS MINERALS

A Second International Conference on the recent progress of work on the physical, chemical, geochemical, and technological aspects of asbestos minerals is planned for 6th to 9th September 1971, at Louvain University, Belgium, in the Institute of Earth Sciences (Institut des Sciences de la Terre).

Requests for registration forms should be directed as soon as possible to Mr. B. Lincoln, Turner and Newall Asbestos Fibre Laboratory, c/o TAC Construction Materials Ltd., P. O. Box 22, Trafford Park, Manchester M17 1UR, England.

### SHORT COURSE IN X-RAY SPECTROMETRY

A two-week short course in modern X-ray spectrometry will be offered at the State University of New York at Albany from June 7 to 18, 1971. The course will be instructional and will develop the basic theory and techniques starting from elementary principles. No previous knowledge or experience are required. The first week will cover basic principles, laboratory techniques, and practical applications. The second week will emphasize advanced techniques, mathematical methods, specimen preparation and presentation, statistics, non-dispersive analysis, computer automation of modern x-ray spectrometers, and computer analysis of data. Registration may be made for one week, either week, at a registration fee of \$275.00, or for the entire two-week session at a registration fee of \$525.00. For further information and to register communicate with Professor Henry Chessin, State University of New York at Albany, Department of Physics, 1400 Washingtion Avenue, Albany, New York 12203.

## CEMENT AND CONCRETE RESEARCH

This new journal commences publication by Pergamon Press in January, 1971 under the editorship of Della M. Roy, Materials Research Laboratory, The Pennsylvania State University. It will feature fundamental research results and comprehensive reviews in the field of cement, concrete and other materials incorporating cement. Publication is by direct reproduction of the manuscript as submitted. Volume 1, issued during 1970 on a bimonthly basis, is \$30.

