Rubber Chemistry & Technology

Instructions to Authors

Please read carefully.

INSTRUCTIONS TO AUTHORS

EDITORIAL POLICY

Journal objective.−The mission of Rubber Chemistry and Technology (RC&T) is to render available in convenient form under one cover important and permanently valuable papers on fundamental research, technical developments, and chemical engineering relating to rubber and its allied substances.

Guidelines.−Previously unpublished papers describing research and development relating to the chemistry, mechanics, or materials science of rubber and allied substances are welcome. Manuscripts should be submitted electronically via RC&T's online peer review system. Authors should write in clear, concise English. Grammar and spelling are the responsibility of the author(s); papers needing significant correction or rewriting will not be accepted for publication. Complete addresses (including telephone/fax numbers and e-mail addresses) of all authors must be supplied with the manuscript. One author shall be clearly identified as the corresponding author.

STYLE GUIDELINES

Reference.−RC&T follows *The ACS Style Guide: A Manual for Authors and Editors*[1] with the exception of reference citations (see "Literature references"). Papers published in recent issues of RC&T may also be consulted for style and format.

Organization.−Titles should be brief. Each paper must begin with a self-contained Abstract of 200 words or less, suitable for publication by *Chemical Abstracts*. Generally, the body of the paper will include the following first-order headings: Introduction; Experimental Section that contains sufficient information to allow duplication of the work elsewhere; Results and Discussion Section; Summary and/or Conclusions; and Reference Section. A brief Acknowledgment Section may also be included. Appendixes are generally discouraged, but may be included if critical to the manuscript.

Headings.−Headings and subheadings must conform to the following hierarchy: first-order headings are centered and in large caps; second-order headings are centered and in small caps; third-order headings are indented, italic type, and followed by a period, a dash, and the text as shown at the beginning of this paragraph; fourth-order headings are indented, regular type, and followed by a period, a dash, and the text. Fourth-order headings should be used sparingly.

Outline Format.−Outlines are permitted *only* in manuscripts submitted for the *Rubber Reviews* issue. The following format is required: Roman numerals preceding first-order headings; large capital letters preceding second-order headings; Arabic numbers preceding third-order headings; and lower-case letters preceding fourth-order headings.

Spacing and Typeface.−All text must be double-spaced including tables, figure captions, and references. Use a plain, simple font for the text (e.g., Times Roman). Use italic typeface for all variables. Use boldface type for all numerals that designate *repeating* chemical names and structures. Boldface type is also used for all vectors, tensors, matrices, and multidimensional physical quantities (e.g., **H**, magnetic strength).

Abbreviation, Acronyms and Symbols.−An abbreviation, acronym, or symbol must accompany the chemical term and be identified parenthetically at the first point of usage. Preferred abbreviations, acronyms, and symbols are listed in reference 1. Preferred acronyms for rubbers, recommended in ASTM D 1418-99, are given in Table I. Abbreviations for chemicals used in compounding should be according to ASTM D 3853-97. Where many acronyms are necessary, they may be listed in a table. An acronym such as "Compound I" or "I" is acceptable in place of a complex chemical or polymer name. SI units are required.

Nomenclature.−Chemical nomenclature should be consistent with *Chemical Abstracts Service* (CAS) or as recommended by the International Union of Pure and Applied Chemistry (IUPAC). A practical summary of acceptable nomenclature is given in reference 1 and is consistent with IUPAC and CAS. Polymers may be named on the basis of either monomer source or resultant polymer chemical structure. For detailed information on polymer nomenclature see the paper by Robert Fox in the 1995 Rubber Reviews.[2]

Trade names and trademarks.−Single use of trade names and trademarks is allowed for identification purposes only. Usage is allowed when purity of a compound or a material is questionable, or when identity is proprietary. The author is responsible for including the appropriate symbols for all trade names and trademarks.

Footnotes.−Footnotes are permitted only in the title of the manuscript and in tables. Footnotes to tables are indicated by superscript, lower-case letters in italic typeface.

Tables.−Number all tables consecutively with Roman numerals and center "Table number" above a descriptive title, also centered. Vertical rules are not permitted. Use horizontal rules only when necessary. In column headings and at the beginning of lines, units appear after a comma (e.g., Temp., ºC). Capitalize only the first letter in column headings and at the beginning of lines. See Tables I and II for details. Each table must be cited in the text and referred to as Table I., etc. Place all tables at the end of the manuscript; one table per page.

Figures and Schemes.−Figures may include graphs, diagrams, sketches, photographs, etc. Schemes are generally used for chemical structures or chemical equations. Each figure and scheme must be included at the end of the manuscript; one figure per page. The RC&T specifications for digital artwork are given in Table II. Figures and schemes are identified by consecutive Arabic numbers. Each figure and scheme must be labeled and identified in the text as Figure 1, Scheme 1, etc. If the figure or scheme contains multiple parts (e.g., a, b, c, etc.), each part must be labeled in the figure and identified in the figure or scheme caption (see Figure 1 and Scheme 1). A list of figure and scheme captions must be placed in consecutive order, on a separate piece of paper, at the end of the manuscript. Landscape orientation for figures and schemes is preferred. Each figure and scheme, including *labels* must be of sufficient size for journal reduction. Figures submitted in color will be published in color online at no charge, but will appear in black and white in the print journal. Authors must ensure that the selection of color and linestyle in any graphic will render adequately in black and white.

Equations.−Equations are centered on the line and numbered consecutively by Arabic numbers in parentheses at the right margin. Closing punctuation is not permitted on the line with the displayed equation.

Literature references.−Authors are responsible for the accuracy of all references. References are listed in order of appearance in the text by superscript Arabic numbers. The use of multiple parts (e.g., references 1a, 1b, etc.) is not permitted. Examples of reference citations are given below.[1-5] Journal names are abbreviated according to the *Chemical Abstracts Service Source Index* (CASSI). A complete listing of all references cited in the manuscript should be given in the Reference Section. List all names as follows: first initial, middle initial, last name, and then qualifiers (e.g., Jr., II). Include the names of all authors in the reference section separating each name with a comma. If a Digital Object Identifier is available for a reference, the author should include this in the citation so that a hyperlink can be coded in the final manuscript.

PROCEDURES

The submission, review, and publication process for all manuscripts is managed electronically. Submit the manuscript with a cover letter summarizing the manuscript's uniqueness and value via our online system. Also make sure to accept the copyright agreement with your submission. The peer review process cannot begin before the copyright agreement is accepted. One author must be identified as corresponding author for the manuscript. All manuscripts are reviewed by at least two referees. Acceptance, acceptance with revisions, or rejection will be communicated to the corresponding author. After revisions are completed, resubmit the manuscript to the online system, including a cover letter explaining changes made, and how reviewers' issues have been addressed. Once a paper is accepted, and has been rendered for the journal, RC&T's publisher will contact the corresponding author with pre-publication proofs in PDF format for approval. If the corresponding author cannot be reached for approval prior to the deadline, the Editor reserves the right to approve or delay publication at his sole discretion. Article reprints may be purchased directly from the journal's printer.

REFERENCES

[1] "The ACS Style Guide: A Manual for Authors and Editors," J.S. Dodd, Ed., American Chemical Society, Washington, DC, 1997.

[2] R. B. Fox, RUBBER CHEM. TECHNOL. **68,** 547 (1995). doi:10.5254/1.3538755

[3] P. J. Nieuwenhuizen, J. M. van Veen, J. G. Haasnoot, and J. Reedijk, RUBBER CHEM. TECHNOL. **72,** 27 (1999); **72,** 43 (1999).

[4] ASTM Standard D792-91, "Density and Specific Gravity of Plastics by Displacement," *Annu. Book ASTM Stand*. **08.01,** 291 (1991).

[5] D. W. Daun and C. J. Gibbler (to Shell Oil Co.), U.S. Patent 5,089,541, Feb. 18, 1992.

TABLE I

NOMENCLATURE FOR RUBBERS[a]

Abbreviation	Name
ABR	Acrylate−butadiene rubber
BIIR	Bromo-isobutylene−isoprene rubber
BR	Butadiene rubber
CIIR	Chloro-isobutylene−isoprene rubber
CR	Chloroprene rubber
EPDM	Ethylene−propylene−diene rubber
EPM	Ethylene−propylene rubber
GR	Guayule rubber
HNBR	Hydrogenated acrylonitrile−butadiene rubber
IIR	Isobutylene−isoprene rubber (butyl rubber)
IM	Polyisobutylene rubber
IR	Synthetic isoprene rubber
NBR	Acrylonitrile−butadiene rubber
NCR	Acrylonitrile−chloroprene rubber
NIR	Acrylonitrile−isoprene rubber
NR	Natural rubber
PBR	Vinylpyridine−butadiene rubber
PSBR	Vinylpyridine−styrene−butadiene rubber
SBR	Styrene-butadiene rubber
SCR	Styrene-chloroprene rubber
SIR	Styrene-isoprene rubber
XSBR	Carboxylic-styrene-butadiene rubber
XNBR	Carboxylic-acrylonitrile-butadiene rubber

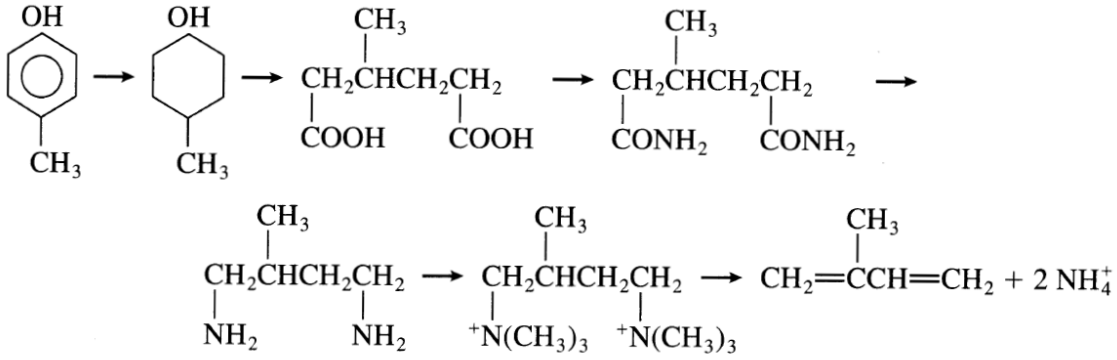
[a]

TABLE II

RC&T SPECIFICATIONS FOR DIGITAL ARTWORK

Type	Specification[a]
Acceptable applications:	Microsoft Word LaTex
Graphics formats	.jpg, .emf, .png, .tif, .bmp, .pdf
Resolution must be at least:	300 dpi for halftones 600 dpi for lettering 1000 dpi for line art (1200 dpi preferred)

[a] Please note that these general specifications may not guarantee usable graphics. Author preparation methods still play a role. Final appearance is the responsibility of the author.



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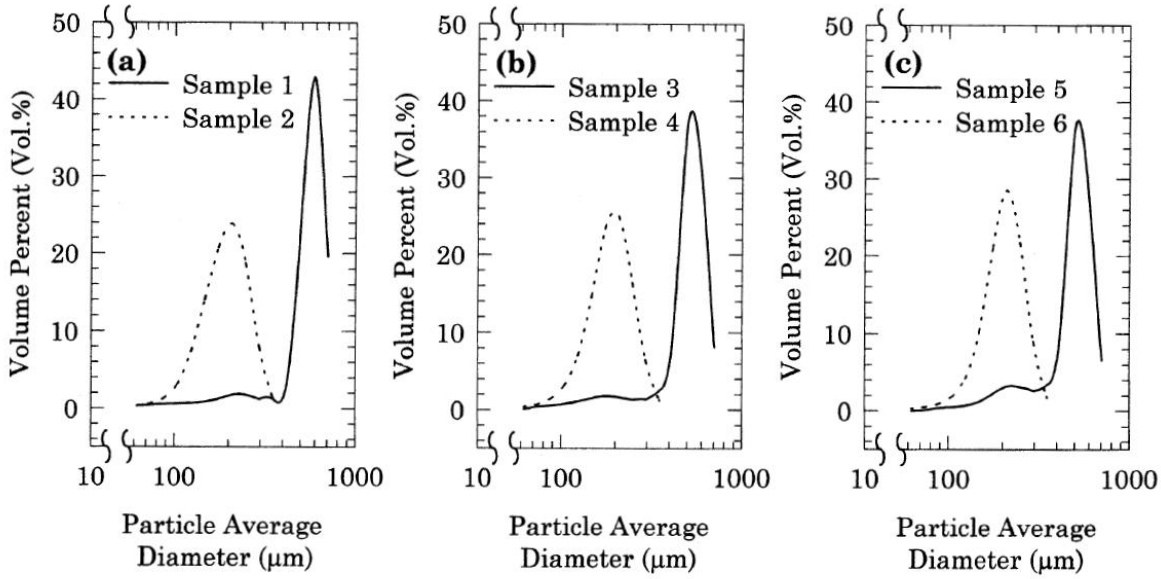

FIG. 1. — Particle size distributions of the rubber particles obtained by laser diffraction method: (a) samples of 1SSSE particles; (b) samples of 2SSSE particles; (c) samples of 3SSSE particles. Copyright ©2000 Rubber Division, American Chemical Society, Inc.