Journal of Undergraduate Chemistry Research

Author Guidelines

I. Manuscripts - General Information.

Manuscripts should be in English, double-spaced type written with 1 inch margins on all sides on 8 \(^{1}/2\) x 11 inch paper, of laser printer quality, typed on one side only, using Times or Times Roman size 12 font. All marks, smudges and other imperfections will be copied so that an unblemished clean original copy is a necessity. The manuscript should not exceed 1900 words. SI units and IUPAC nomenclature should be used. **Three copies of text and illustrations should be submitted.*** This is not necessary if sending as an e-mail attachment. Authors should keep one copy for themselves. Submission implies that the material has not been published in or submitted to any other journal. Previous oral or poster session presentations should be footnoted. All submissions are subject to review by two or more independent reviewers. Authors may suggest reviewers. All manuscripts are subject to editing. Copyright of the manuscript is transferred to the publisher upon acceptance.

Manuscripts should be submitted to: The Journal of Undergraduate Chemistry Research

ATTN: Dr. Daniel Y. Pharr, Editor

Chemistry Department Virginia Military Institute Lexington, VA 24450

*Manuscripts may be sent as e-mail (MS Word) attachment or by high quality Fax. It may be necessary to send hard copies of the figures. No responsibility is assumed by this journal, editor, reviewers or sponsors for any injury and/or damage from products, negligence, experiments, instructions or ideas contained in this journal that result in damage to persons or property.

II. Manuscript Sections and Formatting Requirements

Title. A separate page, with a brief but informative title that avoids the use of symbols and abbreviations.

Authors. A list of the authors and address of the laboratory, including zip code, where the research was done should be supplied. The undergraduate researchers should be noted with an asterisk, *. The corresponding author should be noted with a dagger or obelisk, †, including telephone number and e-mail address if available. If the corresponding author's address is different from the address where the research was done this address should be supplied as a footnote.

Keywords. A list of up to seven keywords should be supplied.

Abstract. A separate page, with a brief but specific account of the research (50 to 150 words) stressing the importance or novelty of the research.

Introduction. Describes the relationship of the present work with previously published works.

Experimental Section. Contains a detailed description of the experimental apparatus, chemicals and procedures used in the research, sufficient for the repetition of the work by an experienced scientist. Manufacturer's name and location should be given in parenthesis. Any particular safety precautions should be given in detail. Toxic materials and hazardous procedures should be reported as such. Complete details for biological materials should include sources, strain designation number and the culture collection deposit. The scientific name should be presented in this section with an appropriate abbreviation used thereafter.

Results and Discussion. Presentation of the results should be concise and brief. Stress the importance of the findings. Similarly the discussion should not be unnecessarily verbose. Well-known calculations are unnecessary. Statistical analysis should be used.

Conclusions. Conclusions should only be given if needed for the further interpretation of the results. They should not be a repeat of the abstract.

Acknowledgment. The acknowledgment of outside funding, special materials or special technical assistance is placed here.

References. All references should appear in numerical order in parenthesis in the text and cited at the end of the paper. Use the following format for references:

- **Journals:** first the authors initials followed by the last name, additional authors listed the same way, the title of the journal in italics (for proper abbreviations use the *Chemical Abstracts Source Index*), the year of publication in bold, the volume number, and the pages. **Example:** (1). D.Y. Pharr, P.C. Uden, and S. Siggia. J. Chrom. Sci., 1992, 30, 124-130.
- **Books:** Use the following format for books: first the authors initials followed by the last name, additional authors listed the same way, in the title of the book in italics and underlined, the volume or edition number. the publisher, city and country of publication and year of publication in parenthesis, followed by the page numbers or chapter. **Example:** (2). T.F. Yen, R.D. Gilbert and J.H. Fendler. Advances in the Applications of Membrane-Mimetic Chemistry, Plenum Press, New York, USA, (1994) pp. 79-94.

- **Unpublished Works:** Should be referenced as outlined above but identified with the phrase "in press" or "submitted to" before the name of the journal for articles, or publisher for books.
- **Patents:** first the initials followed by the last name of the person who applied for the patent, the country of application, the patent number in bold and the year in parentheses.

III. Special Instructions for Illustrations/ Figures / Etc.

Illustrations. Photographs can not be used. Any illustrations should be clear enough to remain legible after reduction to 4 inches wide x 3 inches in height on white paper. Each illustration should be in black and white as a simple graph or line drawing on a separate sheet of paper and camera ready. All illustrations, drawings, text and tables will be scanned into the journal using a digital scanner. All marks, smudges and other imperfections will be copied so that an unblemished clean original copy is a necessity. Omit straight-line graphs that can be described in the text. Refer to the illustrations or drawings using Arabic numerals [Figure 1.] in the order discussed in the paper. Each illustration should have a title and each axis should have a label. Use the same font for these that were used for the text of the paper. The author's name should appear on the reverse side of the illustration.

Figure Legends. Legends should be on a separate sheet of paper using the same font for these that were used for the text of the paper. Each identified by its proper number and then title. The author's name should appear on the reverse side of the figure legend.

Structural Drawings. Authors should use current versions of ChemDraw, ChemIntosh or ChemWindows selecting the preferences "JOC Document" for ChemDraw, and "Reduce 60% JOC Style" for ChemIntosh or ChemWindows.

Tables. There should be no duplication of material in figures and tables. Each table should be typed as text on a separate sheet of paper double-spaced type written with 1 inch margins on all sides on 81/2 x 11 inch paper, typed on one side only, using Times or Times Roman size 12 font. Refer to the tables using Roman numerals in the order discussed in the paper. Each table should have a title at the top of the table and each column should have a heading. Footnotes in the tables are noted with superscript a, b, c... The author's name should appear on the reverse side.

Equations, Formulas and Abbreviations. Number all equations in consecutive order. Clearly indicate if the equation contains a lower-case L instead of a one or a zero instead of an upper case "O". Use mL for milliliters. Unusual abbreviations require a definition when first used. Decimals are indicated by a point "." rather than a comma.