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MANUSCRIPT SUBMISSION REQUIREMENTS CHECKLIST

- Authors are strongly encouraged to complete and submit the JCED Submission Checklist. If a manuscript is submitted that does not conform to the special requirements of JCED, it will be returned to the authors and not accepted for submission until the Checklist is completed and Author Guidelines are followed.

- Upload the Submission Checklist in ACS Paragon Plus as “Supporting Information for Review Only”. By uploading this Checklist, the authors certify that they have read and followed the Author Guidelines.

- Please note especially that uncertainties for all reported quantities must be provided either in the body of the table or as footnotes.

- In the experimental details, emphasize any unexpected, new, and/or significant hazards or risks associated with the reported work.

- Review the guidelines for reporting of new property data obtained from Molecular Modeling and Simulation for the detailed description of computational models and methods, reporting of uncertainties, and presentation of results in tabular form.

SCOPE OF THE JOURNAL

The Journal of Chemical & Engineering Data (JCED) is a monthly journal devoted to the publication of data obtained from both experiment and computation, which are viewed as complementary. It is the only American Chemical Society journal primarily concerned with articles containing data on the phase behavior and the physical, thermodynamic, and transport properties of well-defined materials, including complex mixtures of known compositions. While environmental and biological samples are of interest, their compositions must be known and reproducible. As a result, adsorption on natural product materials does not generally fit within the scope of JCED.

The scope of this Journal includes thermophysical properties obtained from quantum chemistry, molecular simulation, and molecular mechanics calculations as well as reviews of experimental techniques. We welcome reviews of experimental techniques. JCED will consider manuscripts that include small sections on a broader range of topics (e.g., synthesis and spectroscopic characterization of new materials), as long as the focus of the manuscript is the thermophysical properties and/or phase equilibria of the materials. JCED does NOT cover papers for which the primary emphasis is reaction kinetics or catalysis.

MANUSCRIPT TYPES

Articles

Articles should contain new experimental methods, experimental data, or computational results on physical, thermodynamic, or transport properties. JCED encourages submissions that calculate thermophysical properties and phase equilibria from molecular models through the use of quantum chemistry, statistical mechanics, or molecular simulations, particularly when a comparison with experimental data is included.

In an effort to promote the publication of reliable molecular modeling and simulation data, similar to what has been done for many years for experimental data, JCED established guidelines in January 2016 for molecular modeling and simulation publications. Specifically, JCED has requirements for the detailed
description of computational models and methods, reporting of uncertainties, and presentation of results in tabular form. These requirements can be found at [http://trc.nist.gov/JCED-Support.html](http://trc.nist.gov/JCED-Support.html).

Articles should present a significant amount of experimental or computational data on properties of systems of technological or theoretical interest that are not available in the original literature, that have lower uncertainty than those published, or that help resolve conflicts in previously published values. Results must be discussed in detail and comparisons given to previously published results for the same or similar systems. Please use a database like Thermolit ([http://trc.nist.gov/thermolit/](http://trc.nist.gov/thermolit/)) for comparison purposes. The microscopic interpretation of macroscopic measurements on the basis of statistical mechanical and/or spectroscopic data is encouraged. JCED does not accept ‘short articles’ or ‘communications’; all articles must include substantive results and discussion of those results. JCED has special requirements on materials, uncertainties and presentation of results in tabular form. Please review the Data Table Requirements at [http://trc.nist.gov/JCED-Support.html](http://trc.nist.gov/JCED-Support.html).

**Reviews**

Reviews on specific topics within the scope of JCED—thermophysical properties and phase equilibria from experiment and computation—are strongly encouraged. Comprehensive reviews (i.e., a “review”) of a particular area as well as less comprehensive reviews that contain more opinion and perspective (i.e., a “mini-review”) are welcome. Reviews or mini-reviews designed for either newcomers to a particular research field or for experts are of interest. Reviews or mini-reviews of experimental techniques or recommended thermophysical values for pure substances or mixtures are also acceptable. Mini-reviews should be no longer than 4,000 words and reviews should be no longer than 8,000 words. Both should contain figures and schemes when necessary. While reviews and mini-reviews are typically invited, pre-publication inquiries for reviews and mini-reviews are acceptable and should be sent to the Editor-in-Chief ([eic@jced.acs.org](mailto:eic@jced.acs.org)).

**Comments**

Comments include significant remarks on work previously published and are restricted to two printed page including tables, figures, text, and a brief abstract. If a Comment is concerned with the work of other authors, the Editor will permit those authors to reply. Comments should be used only when an important point is to be made. The Editor reserves the right to reject comments that are not substantive.

**ACS PUBLISHING CENTER**

While this document will provide basic information on how to prepare and submit the manuscript as well as other critical information about publishing, we also encourage authors to visit the ACS Publishing Center for additional information on everything that is needed to prepare (and review) manuscripts for ACS journals, such as

- [Mastering the Art of Scientific Publication](https://pubs.acs.org/jchemicaleducation) which shares editor tips about a variety of topics including making your paper scientifically effective, preparing excellent graphics, and writing cover letters.
- Resources on [how to prepare and submit a manuscript](https://pubs.acs.org/jchemicaleducation) to ACS Paragon Plus, ACS Publications’ manuscript submission and peer review environment.
- [Sharing your research](https://pubs.acs.org/jchemicaleducation) with the public through ACS Publications open access program.
MANUSCRIPT PREPARATION

Review Ready Submission

All ACS journals have simplified their formatting requirements in favor of a streamlined and standardized review-ready format for an initial manuscript submission. Read more about the requirements and the benefits these serves authors and reviewers [here](#). Manuscripts submitted for initial consideration must adhere to these standards:

- Submissions must be complete with clearly identified standard sections used to report original research, free of annotations or highlights, and include all numbered and labeled components.
- Figures, charts, tables, schemes, and equations should be embedded in the text at the point of relevance. Separate graphics can be supplied later at revision, if necessary.
- A two-column manuscript template is available and can be used for manuscripts submitted to any ACS journal. Templates are not required but may be useful to approximate how an article will compose. For manuscripts with word count limits, authors are not required to fit content into a page limit based on the template.
- References can be provided in any style, but they must be complete, including titles.
- Supporting Information should be submitted as a separate file(s).
- Author names and affiliations on the manuscript must match what is entered into ACS.

Document Templates and Format

The templates facilitate the peer review process by allowing authors to place artwork and tables close to the point where they are discussed within the text. Learn more about document templates [here](#).

General information on the preparation of manuscripts may also be found in [The ACS Style Guide](#).

Acceptable Software, File Designations, and TeX/LaTeX

See the list of [Acceptable Software](#) and appropriate [File Designations](#) to be sure your file types are compatible with ACS Paragon Plus. Information for manuscripts generated from [TeX/LaTeX](#) is also available.

Cover Letter

A cover letter must accompany every manuscript submission. During the submission process, you may type it or paste it into the submission system, or you may attach it as a file.

The **JCED cover letter** must include:

- The manuscript title
- A statement of why the paper is appropriate for JCED.
- The name and complete contact information (mailing address, telephone number, and e-mail address) of the corresponding author. The corresponding author must be a senior researcher, not a graduate student or post-doctoral researcher, and must have an ACS Paragon Plus ID (see section “Preparing for Submission” below).
- The names(s) of all co-author(s). These will also need to be entered in ACS Paragon Plus in the same sequence as they appear on the first page of the manuscript. Upon submission, all authors are notified, so it is the corresponding author’s responsibility to make sure that co-
authors are listed and that all co-authors have approved the manuscript prior to submission. Deletion of an author after the manuscript has been submitted requires a confirmation letter addressed to the Editor-in-Chief from the author whose name is being deleted. For more information on ethical responsibilities of authors, see the Ethical Guidelines to Publication of Chemical Research.

- The names and e-mail addresses of at least four suggested reviewers (with institutional e-mail addresses). Ideally, suggested referees will work in different countries from the authors.

**Manuscript Text Components**
The required components of every manuscript submission are described below.

Note that *Journal of Chemical & Engineering Data* has special requirements for Symbols, Units and Terminology, Reporting of Uncertainties, Nomenclature, Description of Chemical Samples and reporting of results in Tables. Please pay close attention to these sections below.

**Table of Contents Graphic**
A Table of Contents (TOC) graphic is required for all manuscripts upon submission. This graphic will also be used for the graphical abstract both in the published article and on the ACS mobile application. It may also be chosen as part of the cover art collage for the issue in which the article appears. The TOC graphic should capture reader attention and, in conjunction with the manuscript title, give readers a quick visual impression of the essence of the manuscript. The TOC graphic should be in the form of a structure, graph with labels, drawing, image or micrograph. It should be a distinct graphic, not identical to one of the figures from the article. Tables or spectra are not acceptable. Color is encouraged and is free of charge. The author should submit a graphic in the actual size to be used for the TOC that will fit in an area that is 4 cm high and 8 cm wide. Larger images will be reduced to fit within those dimensions. Type size of labels, formulas, or numbers within the graphic must be legible. The graphic should be labeled “for Table of Contents use only” and contain the title and authors of the manuscript. This item should be appended as the last page of the manuscript.

**Title**
Use a specific rather than a general title. The title should be as brief and informative as possible.

**Authorship**
Use first name, second initial, and surname of each author and provide the e-mail addresses of all authors. The name(s) of the author(s) to whom inquiries about the paper should be addressed should be marked with an asterisk. Give the complete mailing address(es) of the place(s) where the work was conducted; include the fax number of the submitting author. If the current address is different, include it in a footnote on the title page. It is the responsibility of the submitting author to ensure that the manuscript and any revisions have the full approval of all co-authors.
Institution Identification

Many Funders and Institutions require that institutional affiliations are identified for all authors listed in the work being submitted. ACS facilitates this requirement by collecting institution information during manuscript submission under Step 2: Authors and Affiliations in ACS Paragon Plus.

Abstract

The abstract will be used directly by Chemical Abstracts. It should have a maximum length of 200 words. The individual systems, properties, and range of conditions studied should be given.

Text

All manuscripts must contain the following sections: Introduction, Experimental and/or Computational Methods, Results and Discussion, and Conclusions. Provide essential information in a concise fashion and avoid unnecessary duplication in text, tables, and graphs.

Symbols, Units, and Terminology


In the text, tables, and figures, the relationship between the physical quantity, numerical value, and unit must follow the “calculus of quantities.” This means that the physical quantity = numerical value × unit, so physical quantity/unit = numerical value. Symbols should be italicized and units given in roman font. Examples: ln (p/kPa), T/K, $10^{10} \text{D/m}^2\cdot\text{s}^{-1}$. The center dot is the symbol for multiplication (times sign will be accepted). The format of $T = (273.15 \text{ to } 303.15 \text{ K})$ instead of $T = 273.15 – 303.15 \text{ K}$ is preferred. Authors may use mole fraction or mass fraction to define the chemical purity of composition. Molality (with units of mol·kg$^{-1}$) should be used for concentration of solutions. Molarity (with units of mol·m$^{-3}$) is not an acceptable unit of concentration for JCED.

Symbols should be defined where they are first used in the text, equations, figures, and tables. As a result, there should be no need for a Nomenclature List or List of Symbols.

Reporting Uncertainty in Results

The Journal is concerned with the reporting and interpretation of experimental and computational results. Such results are of little use unless they are accompanied by a meaningful statement of uncertainty. Specifically, the uncertainty of each measured variable must be given and combined in quadrature to give the uncertainty in the derived properties, which must be stated at a defined confidence interval. A detailed description on how the estimated uncertainties are obtained must be provided in the Supporting Information. The number of significant digits must not exceed one more digit than specified by the estimated uncertainty. The uncertainties of all reported quantities must be included in the data tables. Sample tables can be found at http://trc.nist.gov/JCED-Support.html and tables in all manuscripts should look exactly like the examples. The data are entered by NIST into their database, as part of our collaboration with TRC at NIST, so the data must be supplied in this

**Chemical Nomenclature**

The IUPAC systematic names for the chemical substances studied must be provided. Once the systematic name has been provided, it is acceptable to define either a common name or acronym and for this be used for the remainder of the text, tables, and figures. Assistance with the IUPAC nomenclature can be found at http://www.chem.qmul.ac.uk/iupac/.

**Chemical Structures.** If needed, structures should be produced with the use of a drawing program such as ChemDraw.

**Description of Chemical Samples**

The origin, purification method, purity, and method of purity determination of all samples must be included and put in a table. The table should look exactly like the one found at http://trc.nist.gov/JCED-Support.html. This information is necessary for our collaboration with TRC at NIST so it must be supplied in this fashion.

**Tables**

Properly formatted Tables are critical to our collaboration with the TRC at NIST. Tables must be exactly as shown in the examples at http://trc.nist.gov/JCED-Support.html. Tables should be numbered with Arabic numbers. The table title (caption) should indicate the contents of the table and appear immediately above the table; it should contain definitions of all symbols in the table and be sufficiently comprehensive to stand alone, independent of the text. The symbols for physical quantities used in the headings of columns or rows must be defined in the caption. The measured values or the averages of several measured values should be given. Tables of smoothed or derived values will not be published except in circumstances where the values are difficult to represent by an equation and the raw values are difficult to use (e.g., thermal functions calculated from heat capacity measurements). **Uncertainties for all reported quantities must be provided either in the body of the table or as footnotes.**

**NMR**

If $^1$H NMR data are used to quantify the purity of a chemical sample, authors should provide a copy of the NMR spectrum, including chemical shifts and peak integrals in the Supporting Information. For papers including five compounds or fewer, authors must provide spectra for all compounds. For papers including more than 5 compounds, authors must include representative NMR spectra for 5 compounds plus 10% of any compounds in excess. For example, if a paper reports 20 compounds, authors should submit $5 + 0.10(15) = 7$ spectra. The ‘Publishing Tools’ page on the ACS Publications Web site has a link to additional guidance for reporting NMR data in research papers.

**Equations**

Equations should be numbered consecutively, and subscripts and superscripts should be evident. When a correlating equation is used to fit results, the units of the variables should be contained within the equation and the numerical values of the parameters should be given in a table of the coefficients for the equation. Designate equations by, for example, eq 1 or eqs 1 to 3.
Safety
Authors must emphasize any unexpected, new, and/or significant hazards or risks associated with the reported work. This information should be in the experimental details section of the full article or communication.

Acknowledgments
Include only necessary credits in the Acknowledgment section at the end of the text.

Additional Information
Additional information that is not essential to the main body of the manuscript should be placed in a separate Supporting Information file and uploaded as Supporting Information for Publication. The Supporting Information file must begin with the manuscript title and authorship as it appears at the beginning of the main manuscript. The main manuscript should include tables showing all of the reported quantities with their uncertainties. However, exceptions can be made when there is an excessively large amount of reported data. In such cases, the tables of data and uncertainties can be placed in the Supporting Information. Other information that might be appropriate as Supporting Information would include long derivations, spectra, and analytical results regarding sample purity.

Figures
Content and Format. Figures showing the trends of the data must be accompanied by Tables of the actual experimental values. Deviations of the measured values from either a smoothing equation or other correlations from the literature are preferred. These plots must also include values of the physical property published by other workers when available. Under specific circumstances, these rules may be relaxed, but that is solely at the discretion of the Editor. Symbols and lines must be defined in the figure caption. Figure axis labels must obey the calculus of quantities and use symbols, not words, for physical quantities. Examples of acceptably formatted figures for various data types are available at http://trc.nist.gov/JCED-Support.html. Illustrations and their captions may be embedded in the text or inserted at the end of the manuscript.

Quality. The quality of the graphics in the Journal depends on the quality of the originals provided by the author. The graphics files furnished by authors with Web submissions are used in the production of the Journal, and the figures cannot be modified or enhanced by the Journal production staff. Any flaws or non-uniform lines should be removed; if present, they will be reproduced in the published version. Images produced from continuous-tone graphics such as photographs should have high contrast.

Color. The use of color in graphics is encouraged where it enhances the understanding of the science being displayed. Attractive figures that contain color may be selected for inclusion in the cover art collage. Please note that the color of symbols appearing in color figures cannot be reproduced within the figure captions.

Supporting Information
This information is provided to the reviewers during the peer-review process (for Review Only) and is available to readers of the published work (for Publication). Supporting Information must be submitted at the same time as the manuscript. See the list of Acceptable Software by File Designation and confirm that your Supporting Information is viewable.
If the manuscript is accompanied by any supporting information files for publication, these files will be made available free of charge to readers. A brief description of each file is required, and the paragraph and descriptions should be placed at the end of the manuscript before the list of references. The appropriate format is as follows:

**Supporting Information.** Brief descriptions in nonsentence format listing the contents of the files supplied as Supporting Information.

When including supporting information for review only, include copies of references that are unpublished or in-press. These files are available only to editors and reviewers.

**Data Requirements**
If a submitted manuscript does not conform to the special requirements of *JCED*, it will be returned to the authors and not accepted for submission until the Checklist is completed and Author Guidelines are followed. Authors are strongly encouraged to complete and submit the *JCED Submission Checklist*, which outlines the journal’s data requirements.

**Language and Editing Services**
A well-written paper helps share your results most clearly. ACS Publications’ [English Editing Service](https://www.acs.org) is designed to help scientists communicate their research effectively. Our subject-matter expert editors will edit your manuscript for grammar, spelling, and other language errors so your ideas are presented at their best.

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The quality of illustrations in ACS journals depends on the quality of the original files provided by the authors. Figures are not modified or enhanced by journal production staff. All graphics must be prepared and submitted in digital format.

Graphics should be inserted into the main body whenever possible. Please see Appendix 2 for additional information.

Any graphic (figure chart, scheme, or equation) that has appeared in an earlier publication should include a [credit line](https://www.acs.org) citing the original source. Authors are responsible for [obtaining written permission](https://www.acs.org) to re-use this material.

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**PREPARING FOR SUBMISSION**
Manuscripts, graphics, supporting information, and required forms, as well as manuscript revisions, must all be submitted in digital format through [ACS Paragon Plus](https://www.acs.org), which requires an ACS ID to log in.
Registering for an ACS ID is fast, free, and does not require an ACS membership. Please refer to Appendix 1 for additional information on preparing your submission.

Prior Publication Policy
*Journal of Chemical & Engineering Data* authors are allowed to deposit an initial draft of their manuscript in a preprint service such as ChemRxiv, bioRxiv, and arXiv prior to submission to the journal. Please note any use of a preprint server in the cover letter and include a link to the preprint, and as appropriate, state how the manuscript has been adjusted/updated between deposition and submission. All other prior/redundant publication is forbidden.

Upon publication in *Journal of Chemical & Engineering Data*, authors are advised to add a link from the preprint to the published paper via the Digital Object Identifier (DOI). Some services, such as ChemRxiv and bioRxiv, add this link for authors automatically after publication.

Editorial Policies

Submission Checklist

Authors are strongly encouraged to complete the Submission Checklist for the *Journal of Chemical & Engineering Data*, which can be found at [http://trc.nist.gov/JournalCoop/JCED/checklist.html](http://trc.nist.gov/JournalCoop/JCED/checklist.html). The Checklist should be uploaded as Supporting Information for Review Only. By uploading this Checklist, the authors certify that they have read and followed the Author Guidelines.

Providing Potential Reviewer Names

Suggest at least 4 possible reviewers. Ideally, suggested referees will work in different countries from the authors. Authors are encouraged to avoid suggesting reviewers from the authors’ institutions. Do not suggest reviewers who may have a real or perceived conflict of interest. Whenever possible, suggest academic email addresses rather than personal email addresses.

Manuscript Transfer

If your submission is declined for publication by this journal, the editors might deem your work to be better suited for another ACS Publications journal and suggest that the authors consider transferring the submission. Manuscript Transfer simplifies and shortens the process of submitting to another ACS journal, as all the coauthors, suggested reviewers, manuscript files, and responses to submission questions are copied by ACS Paragon Plus to the new draft submission. Authors are free to accept or decline the transfer offer.

Note that each journal is editorially independent. Transferring a manuscript is not a guarantee that the manuscript will be accepted, as the final publication decision will belong to the editor of the next journal.

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It is the responsibility of the Corresponding Author to ensure that all authors listed on the manuscript agree with the changes made on the proofs. Galley proofs should be returned within 48 hours in order to ensure timely publication of the manuscript.

**Publication Date and Patent Dates**

Accepted manuscripts will be published on the ACS Publications Web site as soon as page proofs are corrected and all author concerns are resolved. The first date on which the document is published on the Web is considered the publication date.

Publication of manuscripts on the Web may occur weeks in advance of the cover date of the issue of publication. Authors should take this into account when planning their patent and intellectual property activities related to a document and should ensure that all patent information is available at the time of first publication, whether Just Accepted, ASAP, or issue publication.

All articles published ahead of print receive a unique Digital Object Identifier (DOI) number, which is used to cite the manuscript before and after the paper appears in an issue. Additionally, any supplemental information submitted along with the manuscript will automatically be assigned a DOI and hosted on Figshare to promote open data discoverability and use of your research outputs.

Publication on the Web usually occurs within 2 to 4 weeks after the manuscript is accepted (and about 4 working days after receipt of manuscript proof corrections), and this can be anywhere from 2 to 6 weeks in advance of the cover date of the issue. Manuscripts assigned to a *Journal of Chemical & Engineering Data* special issue may remain ASAP for several months. The actual date on which an accepted paper is published on the Web is recorded on the Web version of the manuscript and on the first page of the PDF version.

**ASAP Publication**

Manuscripts will be published on the “Articles ASAP” page on the Web as soon as page proofs are corrected and all author concerns are resolved. ASAP publication usually occurs within a few working days of receipt of page proof corrections, which can be several weeks in advance of the cover date of the issue.

**Post-Publication Policies**

The American Chemical Society follows guidance from the Committee on Publication Ethics (COPE) when considering any ethical concerns regarding a published article, Retractions, and Expressions of Concern.

**Additions and Corrections**

Additions and Corrections may be requested by the author(s) or initiated by the Editor to address important issues or correct errors and omissions of consequence that arise after publication of an article. All Additions and Corrections are subject to approval by the Editor, and should bring new and directly relevant information and corrections that fix scientific facts. Minor corrections and additions will not be published. Readers who detect errors of consequence in the work of others should contact the corresponding author of that work.

Additions and Corrections must be submitted as new manuscripts via ACS Paragon Plus by the Corresponding Author for publication in the “Addition/Correction” section of the Journal. The
corresponding author should obtain approval from all coauthors prior to submitting or provide evidence that such approval has been solicited. The manuscript should include the original article title and author list, citation including DOI, and details of the correction.

Retractions
Articles may be retracted for scientific or ethical reasons and may be requested by the article author(s) or by the journal Editor(s), but are ultimately published at the discretion of the Editor. Articles that contain seriously flawed or erroneous data such that their findings and conclusions cannot be relied upon may be retracted in order to correct the scientific record. When an article is retracted, a notice of Retraction will be published containing information about the reason for the Retraction. The originally published article will remain online except in extraordinary circumstances (e.g. where deemed legally necessary, or if the availability of the published content poses public health risks).

Expressions of Concern
Expressions of Concern may be issued at the discretion of the Editor if:

- there is inconclusive evidence of research or publication misconduct by the authors;
- there is evidence that the findings are unreliable but the authors’ institution will not investigate the case;
- an investigation into alleged misconduct related to the publication either has not been, or would not be, fair and impartial or conclusive;
- an investigation is underway but a judgment will not be available for a considerable time.

Upon completion of any related investigation, and when a final determination is made about the outcome of the article, the Expression of Concern may be replaced with a Retraction notice or Correction.

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At ACS Publications, we know it is important for you to be able to share your peer reviewed, published work with colleagues in the global community of scientists. As sharing on sites known as scholarly collaboration networks (SCNs) is becoming increasingly prevalent in today’s scholarly research ecosystem, we would like to remind you of the many ways in which you, a valued ACS author, can share your newly published research with ACS Articles on Request (see below). Don’t forget to promote your research and related data on social media, at conferences, and through scholarly communication networks. Increase the impact of your research using the following resources: Altmetrics, Figshare, ACS Certified Deposit.

E-Prints
When your article is published in an ACS journal, corresponding authors are provided with a link that offers up to 50 free digital prints of the final published work. This link is valid for the first 12 months following online publication, and can be shared via email or an author’s website. After one year, the access restrictions to your article will be lifted, and you can share the Articles on Request URL on social media and other channels. To access all your Articles on Request links, log in to your ACS Publishing Center account and visit the “My Published Manuscripts” page.
Appendix 1: PREPARING FOR SUBMISSION
We’ve developed ACS’ publishing and editorial policies in consultation with the research communities that we serve, including authors and librarians. Browse our policies below to learn more.

Ethical Guidelines
ACS editors have provided Ethical Guidelines for persons engaged in the publication of chemical research—specifically, for editors, authors, and reviewers. Each journal also has a specific policy on prior publication.

Safety Considerations
Authors must emphasize any unexpected, new, and/or significant hazards or risks associated with the reported work. This information should be in the Experimental Section of the full article and included in the main text of a letter.

Conflict of Interest Disclosure
A statement describing any financial conflicts of interest or lack thereof is published in each ACS journal article.

During the submission process, the Corresponding Author must provide a statement on behalf of all authors of the manuscript, describing all potential sources of bias, including affiliations, funding sources, and financial or management relationships, that may constitute conflicts of interest. If the manuscript is accepted, the statement will be published in the final article.

If the manuscript is accepted and no conflict of interest has been declared, the following statement will be published in the final article: “The authors declare no competing financial interest.”

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If any change in authorship is necessary after a manuscript has been submitted, the Corresponding Author must e-mail a signed letter to the Editor-in-Chief confirming that all of the original coauthors have been notified and have agreed to the change. If the change involves the removal of a coauthor’s name, the Corresponding Author must, in addition, arrange for the coauthor involved to e-mail a separate signed letter to the Editor-in-Chief consenting to the change. No changes in the author list will be permitted after a manuscript has been accepted.
During manuscript submission, the submitting author must provide contact information (full name, email address, institutional affiliation, and mailing address) for all of the coauthors. Because all of the author names are automatically imported into the electronic Journal Publishing Agreement, the names must be entered into ACS Paragon Plus in the same sequence as they appear on the first page of the manuscript. (Note that coauthors are not required to register in ACS Paragon Plus.)

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Authors are responsible for ensuring that all patent activities and intellectual property issues are satisfactorily resolved prior to first publication (Just Accepted, ASAP, or in issue). Acceptance and publication will not be delayed for pending or unresolved issues of this nature.

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Authors submitting manuscript revisions are required to provide their own personal, validated ORCID iD before completing the submission, if an ORCID iD is not already associated with their ACS Paragon Plus user profiles. This ID may be provided during original manuscript submission or when submitting the manuscript revision. All authors are strongly encouraged to register for an ORCID iD, a unique researcher identifier. The ORCID iD will be displayed in the published article for any author on a manuscript who has a validated ORCID iD associated with ACS when the manuscript is accepted.

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With an ORCID iD, you can create a profile of your research activities to distinguish yourself from other researchers with similar names, and make it easier for your colleagues to find your publications. If you do not yet have an ORCID iD, or you wish to associate your existing ORCID iD with your ACS Paragon Plus account, you may do so by clicking on “Edit Your Profile” from your ACS Paragon Plus account homepage and following the ORCID-related links. Learn more at http://www.orcid.org.

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Funder Reporting Requirement
Authors are required to report funding sources and grant/award numbers. Enter ALL sources of funding for ALL authors in BOTH the Funder Registry Tool in ACS Paragon Plus and in your manuscript to meet this requirement.

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Appendix 2: Preparing Graphics

Resolution
Digital graphics pasted into manuscripts should have the following minimum resolutions:
- Black and white line art 1200 dpi
- Grayscale art 600 dpi
- Color art 300 dpi

Size
Graphics must fit a one- or two-column format. Single-column graphics can be sized up to 240 points wide (3.33 in.) and double-column graphics must be sized between 300 and 504 points (4.167 in. and 7 in.). The maximum depth for all graphics is 660 points (9.167 in.) including the caption (allow 12 pts. For each line of caption text). Lettering should be no smaller than 4.5 points in the final published format. The text should be legible when the graphic is viewed full-size. Helvetica or Arial fonts work well for lettering. Lines should be no thinner than 0.5 point.

Color
Color may be used to enhance the clarity of complex structures, figures, spectra, and schemes, etc., and color reproduction of graphics is provided at no cost to the author. Graphics intended to appear in black and white or grayscale should not be submitted in color.

Type of Graphics
Table of Contents (TOC)/Abstract Graphic
Consult the Guidelines for Table of Contents/Abstract Graphics for specifications.

Figures
A caption giving the figure number and a brief description must be included below each figure. The caption should be understandable without reference to the text. It is preferable to place any key to symbols used in the artwork itself, not in the caption. Ensure that any symbols and abbreviations used in the text agree with those in the artwork.

Charts
Charts (groups of structures that do not show reactions) may have a brief caption describing its contents.

Tables
Each table must have a brief (one phrase or sentence) title that describes the contents. The title should be understandable without reference to the text. Details should be put in footnotes, not in the title. Tables should be used when the data cannot be presented clearly in the narrative, when many numbers must be presented, or when more meaningful inter-relationships can be conveyed by the tabular format. Tables should supplement, not duplicate, information presented in the text and figures. Tables should be simple and concise.

Schemes
Each scheme (sequences of reactions) may have a brief caption describing its contents.

Chemical Structures
Chemical structures should be produced with the use of a drawing program such as ChemDraw.
Cover Art
Selected TOC graphics are featured on the front cover of Journal of Chemical & Engineering Data.

<Journal of Chemical & Engineering Data> also offers authors to promote their work through Supplementary Covers. Submit your cover idea, artwork, and caption when submitting your manuscript revision in ACS Paragon Plus. If your article is accepted for publication, your suggestion may be selected for use on one of the journal’s supplementary covers.

Web Enhanced Objects (WEO)
The Web editions of ACS journals allow readers to view multimedia attachments such as animations and movies that complement understanding of the research being reported.

WEOs should be uploaded in ACS Paragon Plus with ‘Web Enhanced Object’ selected as the file designation. Consult the list of compatible WEO formats.