

Last updated: April 28, 2025 [View the latest guidelines online](#)

Manuscript Submission Requirements Checklist

- **Cover Letter.** A complete cover letter must accompany every manuscript. The required cover letter, addressed to the Editor-in-Chief, should describe the relevance of the work and the intended audience.
- **Reviewers.** Recommended reviewers should be experts in the subject matter of the manuscript and not be anyone who is or has been a former adviser/advisee, colleague in the same institution, research collaborator, and/or co-author of articles and patents or in any other way has a conflict of interest.
- **Authors.** All authors and their respective email addresses should be entered into the ACS Publishing Center. Corresponding author(s) are designated with an asterisk. The [ACS Ethical Guidelines](#) in Appendix 1 must be read and understood by all authors.
- **Title.** The title should use Title Case and avoid words like “New,” “Novel,” “First,” “Outstanding,” “Excellent,” “Exceptional,” “Green,” or other similar descriptive words unless appropriately supported.
- **Table of Contents (TOC) graphic.** Provide a TOC graphic at the end of the manuscript, included in the manuscript file, or the file may be uploaded separately. Ensure compliance with the TOC requirements outlined in [Appendix 2](#).
- **Manuscript.** Manuscript text should be submitted in one-column format and double-spaced, using headings and subheadings (without numbers, references, or acronyms in the headings). Ensure compliance with the length guidelines, scope, and text component requirements listed in this document.
- **Figures and Tables.** Figures and Tables should be embedded within the manuscript text, close to the point near their first mention. Artwork should be provided at the size at which it will published in the journal. Each graphic should be clearly labeled and include a brief caption. Ensure compliance with the resolution, size, color, line width, font, and other requirements described in [Appendix 2: Preparing Graphics](#). Authors including equations in their manuscripts are encouraged to consult the [ACS Guidelines for Presenting Mathematical Information](#).
- **Permissions.** Permissions for graphics copied or adapted from previous work should be provided upon submission (uploaded separately). In addition, appropriate credit lines should appear in the figure captions.
- **References.** References should be cited within the text by consecutive numbers. Arabic numbers in the order of their first citation in the text are required. The corresponding numbers must be inserted at the appropriate locations in the text as superscript close to the last character and outside any punctuation marks. The references should adhere to the format described in the [Manuscript Preparation](#) section.
- **Supporting Information (SI, if any).** All nonessential figures, tables, and procedures should be included as SI and uploaded as a separate file (PDF recommended). The availability of SI should be mentioned with a description in the format, “**Supporting Information.** Brief descriptions in nonsentence format listing the contents of the files supplied as Supporting Information.” The SI should be formatted with a cover sheet listing authors, manuscript title, and a table of contents where appropriate. SI pages must be numbered consecutively, starting with page S1. Tables and Figures should be numbered starting with Table S1 and Figure S1.

Scope of the Journal

While safety permeates all ACS journals, it benefits from its preeminence in [ACS Chemical Health & Safety](#) where its authors influence chemical safety and guide tomorrow’s science. Chemical safety

research can be transformational and innovative, and it can also focus on practice and be narrowly scoped. This includes foundational datasets or variations on well-studied themes because they hold value to those working with hazardous materials. *ACS Chemical Health & Safety* provides the opportunity to publish across all these areas. As a discipline, chemical health and safety does not limit itself to laboratories and chemical facilities, and our authors are more than just chemists and chemical engineers; they are scientists with broad research backgrounds and members of the public from many disciplines, including environmental safety and health professionals, industrial hygienists, public health professionals, safety policy makers, human factors specialists, and more.

Sample topics that span the journal's scope include:

- Fundamental chemical safety research and datasets
 - Emerging technologies (e.g., AI/machine learning, virtual reality, green chemistry, decarbonization, advancements in personal protective equipment (PPE), etc.)
 - Analysis of previously published safety datasets
 - Data from field testing and real-world simulations
 - Investigations of new inherently safer materials and procedures
 - Effectiveness of chemical health and safety training, tools, or resources
 - Scientific studies aimed at reducing chemical exposure and improving laboratory and/or industrial working conditions
- Chemical health safety and security warnings
 - Near-miss or incident case studies and accident investigations
 - Commentaries on current safety and security issues
 - Communications on techniques and engineering solutions that enhance safe and secure working environments
 - Reviews, commentaries, and methodologies that address the life cycle of hazardous materials and related techniques.
- Chemical risk assessment and management
 - Risk assessment methodologies and applied case studies
 - Case studies demonstrating best practices in risk management approaches in a variety of settings (e.g., academic laboratories, industrial research and development laboratories, industrial manufacturing, storage, and transportation)
 - Chemical safety and security decision making, including economic considerations
 - Laboratory design
 - Use of chemicals in other academic settings (e.g., art or theatre departments, research hospitals, etc.)
- Other topics that influence chemical safety and guide tomorrow's science
 - New emerging threats (e.g., COVID impacts on researchers and utilizing chemicals to mitigate associated risks)
 - Occupational safety and health related to chemical exposures
 - Process safety and security associated with the management of bulk hazardous material
 - Regulatory updates, requirements, and implementation
 - Emergency response and planning
 - Development and management of safety cultures
 - Safety commentaries or case studies from other disciplines that provide lessons and insights that could be adapted for chemical safety
 - The scientific study of chemical safety training, teaching, and learning

Manuscripts relating to commercial products are welcome, provided that they are not advertisements.

Topics that address new medical approaches (e.g., those utilizing nano materials to deliver targeted drug therapies) and environmental contaminants will be considered, but are not regularly accepted for peer review because we believe the topics could be better served by the journals that specialize in those fields.

All manuscripts are subject to critical, anonymous peer review. The final decision relating to a manuscript's suitability for the journal rests solely with the Editor.

Manuscript Types

ACS Chemical Health & Safety consists of three categories of manuscripts: front matter, research, and back matter. Front matter consists of Editorials, Spotlights, In Focus, and Commentaries. The Editor-in-Chief and associate editors make final decisions about all published material. Front matter content is managed by the Editor-in-Chief and Managing Editor. These manuscripts may undergo peer review at the discretion of the editors. Research includes Reviews, Methods/Protocols, Case Studies, Letters, and Articles. These manuscripts will be screened initially by the assigned editor and then reviewed by other scientists who assess the significance, originality, and validity of the work. Back matter of the journal includes Correspondence/Rebuttals, Additions and Corrections, and Mastheads.

A useful article is available for authors to consider in their manuscript preparation, "[Crafting Articles: Guidance to Authors for ACS Chemical Health & Safety](#)" (DOI: 10.1021/acs.chas.3c00050).

Editorial – Editorials are opinion pieces by the Editor-in-Chief, an Associate Editor, or a guest writer invited by the Editor. Editorials provide a discussion forum for topics of interest to the chemical health and safety community.

Spotlight – Spotlights are community resources that consist of multiple short (<500 word) summaries of papers or resources either within, or external to, the journal. Each individual summary describes only one paper or resource. Topics may include literature, regulatory updates, patents, conferences, guidance documents, books, and other related content. Spotlights are not peer reviewed but are subject to editorial approval. Interested authors may submit contributions to spotlights@safety.acs.org and be coauthored, or share ideas on social media with #SafetySpotlights.

In Focus – In Focus are invited by the Editors. These are resources of broad significance to the chemistry community or of public interest. The format is intended to be digestible for a broad audience and foster uptake and wide dissemination of the work to bridge communities and accelerate scientific advancement. In Focus are not peer reviewed but are subject to editorial approval.

Commentary – Commentaries are scholarly discussions of a topic of interest to the chemical health and safety community that include the opinions of the author(s). The manuscript should provide sufficient information for readers to understand the topic or formulate their own opinions. Commentaries may undergo peer review at the direction of the assigned editor.

Review – Reviews should be concise, yet comprehensive, and written by experts for nonexperts. Reviews should be written for a more general audience, both for academic as well as industry relevance, and provide a balanced view of the topic in question. A Review's purpose is to acquaint the readers of the journal with recent progress in key areas. For example, surveys of either the literature or resources (e.g. books, software, videos, audio products). This may include methods, protocols, or best practices for safety procedures, provided that the manuscript has a comprehensive review of relevant sources. Exclusive focus on the author's own work is discouraged in Reviews. Both invited and contributed Reviews will be considered for publication and will be peer-reviewed. Authors interested in contributing a Review may submit a one-page outline to the Editor-in-Chief's office for consideration (eic@safety.acs.org). It is incumbent on authors to submit copyright permissions for material that is being reproduced from other sources.

Methods/Protocols - Methods/Protocols feature safety methods and protocols related to the entire chemistry community. The journal aims to provide one-stop access to both novel and improvised safety methods as well as standard techniques, such that this content is peer reviewed and can be made more visible and easily discoverable. Methods/Protocols should have sufficient data (where applicable) and a comprehensive review of relevant sources. Authors are asked to include videos and photographs of experiments or apparatus as well as sufficient details to ensure reproducibility. There is no set length and manuscripts may take many forms depending on the content (e.g. short practical safety applications, validation of safety methods, or comprehensive protocol summaries).

The following order of presentation is preferred:

- Abstract, TOC graphic, keywords
- Introduction
- Materials, methods, or theory used
- Procedure
- Safety-specific sections, including:
 - Hazard and risk assessment
 - Hierarchy of controls
 - Emergency preparedness
 - Policy, regulation, and code considerations
- Results and discussion
- Conclusions
- Acknowledgements, supporting information description
- References

Case Study - Case Studies are scientific reports to the community that describe and analyze a scenario. Studies should provide discussion in the context of other sources, identify key problems or challenges, and provide recommendations, lessons learned, or conclusions using supporting evidence. Topics may include accidents, near misses, organizational changes, new programs, application of existing techniques to new environments, regulatory consequences and implementation, or other topics.

Letter – Letters are short articles that report results whose immediate availability to the chemical health and safety community is deemed important. Letters are intended to provide rapid communication of important results and should be written in a form that is engaging and easy to follow.

Article – Articles should describe work related to preserving the safety of individuals who work with chemicals or in the workplace of the chemistry enterprise. This may include methods, protocols, or best practices for safety procedures, provided that the manuscript has sufficient data and a comprehensive review of relevant sources. Articles should cover their subjects with thoroughness, clarity, and completeness but should be as concise as possible, describing original work that has not been previously published and is not under consideration for publication elsewhere.

Correspondence/Rebuttal – Correspondence is a technical contribution providing, with supporting material, a respectful but alternative point of view to one that has appeared in *ACS Chemical Health & Safety*. The author of the original publication may be invited to write a Rebuttal. The Correspondence and Rebuttal will appear in the same issue of the journal. Correspondence/Rebuttal may undergo peer review under the direction of the assigned editor.

Additions and Corrections – Additions and Corrections may be used by the authors of a paper to correct errors and omissions of consequence that are identified after publication. Readers who detect errors of consequence in the work of others should contact the corresponding author of the paper in question. All Additions and Corrections are subject to editorial approval, and corrections of minor errors or omissions will not be published. Additions and Corrections must be approved by all coauthors before submission.

Note: *ACS Chemical Health & Safety* may occasionally invite authors to contribute commissioned content at the Editor's discretion and may offer a small honorarium for such contributions. Honoraria are extremely limited, and not all invited manuscripts will receive honoraria. Compensation will be based on content, author expertise, and timeliness. Commissioned manuscripts will be held to the same high standard as other manuscripts during rigorous peer review, and commissioned content is not guaranteed acceptance.

ACS Researcher Resources

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 [ACS Researcher Resources](#) for additional information on everything that is needed to prepare (and review) manuscripts for ACS journals and partner journals, such as

- [Mastering the Art of Scientific Publication](#), 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](#) to the ACS Publications manuscript submission and peer review system, including details on selecting the applicable [Journal Publishing Agreement](#).
- [Sharing your research](#) with the public through the ACS Publications open access program.
- [ACS Reviewer Lab](#), a free online course covering best practices for peer review and related ethical considerations.
- [ACS Author Lab](#), a free online course that empowers authors to prepare and submit strong manuscripts, avoiding errors that could lead to delays in the publication process.
- [ACS Inclusivity Style Guide](#), a guide that helps researchers communicate in ways that recognize and respect diversity in all its forms.

Manuscript Preparation

Submit with Fast Format

All ACS journals and partner journals have simplified their formatting requirements in favor of a streamlined and standardized 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.
- When required by a journal's structure or length limitations, manuscript templates should be used.

- References can be provided in any style, but they must be complete, including titles. For information about the required components of different reference types, please refer to the [ACS Style Quick Guide](#).
- Supporting Information must be submitted as a separate file(s).

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](#). The use of document templates is encouraged but not required.

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

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 the submission system. 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.

Manuscript Text Components

Title

The title should clearly and concisely reflect the emphasis and content of the manuscript and be accessible to a broad audience. The title should not contain esoteric terms, symbols, trademark names, institution names, abbreviations, or uncommon acronyms, and part or series numbers. The title should use Title Case and avoid words like “New,” “Novel,” “First,” “Outstanding,” “Excellent,” “Exceptional,” “Green,” or other similar descriptive words unless appropriately supported. Indicate the audience and the setting if that is significant. A well-crafted title aids in successful information retrieval and supports search engine optimization.

Author List

Include all those who made significant and substantial intellectual contributions to the work and to the preparation of the manuscript. Because all of the author names are automatically imported into the electronic Journal Publishing Agreement, all author names must be entered into the ACS Publishing Center. Authors should ensure that the information in their ACS Publishing Center account is up to date. At least one author must be designated as the person to whom correspondence should be addressed, indicated by an asterisk after that author’s surname and inclusion of an email address in the manuscript file. The corresponding author is responsible for ensuring that all authors have approved the manuscript before submission and for all subsequent revisions. An institutional affiliation should be listed for each author. If the present affiliation of an author differs from the one at which the work was done, the new affiliation and address should be given in an author information Note at the end of the manuscript file.

Abstract

The abstract should be approximately 250 words or fewer and summarize the important points made in the manuscript. Describe briefly and clearly the purpose of the work, the principle results and/or major conclusions. The abstract should not include words like “New,” “Novel,” “First,” “Outstanding,” “Excellent,” “Exceptional,” “Green,” or other similar descriptive words unless rigorously supported. Include the abstract text in the manuscript file. No cited literature or display elements should appear in the abstract. A well-written abstract aids in successful information retrieval and is one of the initial aspects considered closely by Editors.

Main Text

Manuscript content should adhere to the criteria for the manuscript type selected. The Journal expects that manuscripts will be written in grammatically correct, scientific English; the absence of these qualities inhibits and detracts from the effectiveness of the review and evaluation process and may lead to substantial delays.

Text should be presented in one column with numbered pages and organized using headings and subheadings (without numbers, references, or acronyms in the headings). Abbreviations and acronyms should be used sparingly and should be defined at their first occurrence. Other than headings, present the text in black. Whenever possible, use systematic nomenclature as recommended by IUPAC for chemical compounds and SI units, including in table column headings. Present analyzed data in an accurate, complete, yet concise manner. Express results with indications of their reliability. This includes appropriate use of significant figures, as well as statistical parameters (e.g., standard deviation, p-values indicating statistical significance, and measures of effect size). Terms, variables, and symbols should be defined within the text (rather than in a list of abbreviations). The Journal does not publish appendices; such material should be removed from the main text of the manuscript and uploaded as separate Supporting Information.

Note: Authors are responsible for complying with any and all applicable federal, local, and institutional requirements before making submissions to this Journal. Where appropriate, authors are also responsible for ensuring that the anonymity of individuals is protected.

Display Elements

Display elements should be self-explanatory, that is, understandable independent of the text. Each multipart figure, scheme, or equation must be assembled into a single object, and lines should not be placed around the entire display element. Any references that are cited in a caption need to be clarified with a credit line; that is, the caption must make clear whether the graphic has been adapted or reproduced from another source or is original but based on material from another source. Display elements in the Supporting Information should be numbered sequentially and discretely from those in the manuscript. Specifications for preparing graphics are detailed in [Appendix 2](#).

Supporting Information

All nonessential figures, tables, and procedures should be included as SI and uploaded as a separate file (PDF recommended). Supporting Information must be submitted at the same time as the manuscript. The availability of SI should be mentioned with a description in the manuscript. The SI should be formatted with a cover sheet listing authors, manuscript title, and a table of contents where appropriate. SI pages must be numbered consecutively, starting with page S1. Tables and Figures should be numbered starting with Table S1 and Figure S1.

References

A thorough literature review should be conducted, and the submission should be placed within the context of previously published work, including that which has appeared in the Journal. Citations and references should follow the publication style found in The ACS Style Guide. Titles are required for all works cited; please provide complete publication information, including an issue number where applicable, and a DOI. Unpublished work that has been cited should be uploaded for editorial review. Reference call-out numbers in the text should be superscripted sequential Arabic numerals. Journal names are abbreviated according to the Chemical Abstracts Service Source Index (CASSI). Page ranges for articles as well as book citations should also be provided. Rather than providing URLs in the main text of the manuscript, add a citation for each discrete URL and include it sequentially in the References section with an “accessed” statement: “(accessed [Month] 20XX).” References to resources only in a language other than English will be largely inaccessible to readers; including sufficient references to English-language resources will benefit readers and increase the value of the manuscript. Textual material that might otherwise constitute a footnote or endnote must be incorporated into the References section and presented using complete sentences.

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, nonsentence description of the actual contents of each file, including the file type extension, is required. This description should be labeled Supporting Information and should appear before the Acknowledgement and Reference sections. Examples of sufficient and insufficient descriptions are as follows:

Examples of sufficient descriptions: “Supporting Information: ^1H NMR spectra for all compounds (PDF)” or “Additional experimental details, materials, and methods, including photographs of experimental setup (DOC)”.

Examples of insufficient descriptions: “Supporting Information: Figures S1-S3” or “Additional figures as mentioned in the text”.

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.

Research Data Policy

All ACS journals strongly encourage authors to make the research data underlying their articles publicly available at the time of publication.

Research data is defined as materials and information used in the experiments that enable the validation of the conclusions drawn in the article, including primary data produced by the authors for the study being reported, secondary data reused or analyzed by the authors for the study, and any other materials necessary to reproduce or replicate the results.

The [ACS Research Data Policy](#) provides additional information on Data Availability Statements, Data Citation, and Data Repositories.

Data Requirements

Equations. Authors including equations in their manuscripts are encouraged to consult the [ACS Guidelines for Presenting Mathematical Information](#).

Use of Human Subjects or Animals in Research. For information about carrying out and reporting on Human and Animal Studies, please refer to the Biological Data section of the [ACS Research Data Guidelines](#).

Contributor Roles Taxonomy (CRediT)

[CRediT](#) is a high-level taxonomy used to identify and acknowledge the roles played by contributors to scientific scholarly output. During original submission and/or revision, there are 14 standard roles from which the submitting author can select to describe the specific contributions of each author. At this time, CRediT is optional for authors. Please note that author CRediT information will not transfer if the manuscript is transferred to a non-pilot journal. [Click here to learn more about the ACS CRediT pilot](#).

Language and Editing Services

A well-written paper helps share your results most clearly. ACS Publications' [English Editing Service](#) 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.

Preparing Graphics

The quality of illustrations in ACS journals and partner 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](#) citing the original source. Authors are responsible for [obtaining written permission](#) to re-use this material.

Figure and Illustration Services

The impact of your research is not limited to what you can express with words. Tables and figures such as graphs, photographs, illustrations, diagrams, and other visuals can play a significant role in effectively communicating your findings. Our [Artwork Editing](#) and [Graphical Abstract](#) services generate publication-ready figures and Table of Contents (TOC) graphics that conform to your chosen journal's specifications. For figures, this includes changes to file type, resolution, color space, font, scale, line weights, and layout

(to improve readability and professional appearance). For TOC graphics, our illustrators can work with a rough sketch or concept or help extract the key findings of your manuscript directly for use as a visual summary of your paper.

Preparing for Submission

Manuscripts, graphics, supporting information, and required forms, as well as manuscript revisions, must all be submitted in digital format through [ACS Publishing Center](#), 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

ACS Chemical Health & Safety considers for publication only original work that has not been previously published and is not under consideration for publication elsewhere. Duplication of already published data will eliminate the article from consideration. Publication of an extended abstract does not preclude consideration for publication. It is the responsibility of authors to notify the journal of any abstracts that have been published. Description of work in the form of a patent or a patent application does not preclude publication in *ACS Chemical Health & Safety*.

ACS Chemical Health & Safety authors are allowed to deposit an initial draft of their manuscript with a preprint service or the applicable repository for their discipline prior to submission. Please note any use of a preprint server in the cover letter, 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, authors are advised to add a link from the preprint to the published article via the Digital Object Identifier (DOI). For further details, contact the Editorial Office.

The ACS Publications policy on theses and dissertations can be found [here](#).

Editorial Policies

Once submitted, the manuscript is checked for suitability for the journal (content, manner of presentation, linguistic quality) by the Editor. If the manuscript is deemed acceptable, reviewers are selected and invited by the Editor to comment on the scientific content of the submitted manuscript. In line with the peer review rules of the ACS, the reviewers are anonymous and are known to the Editor and the Journal staff only. The ultimate decision for a manuscript is solely at the discretion of the Editor.

Providing Potential Reviewer Names

Authors are required to submit the names, email addresses, and affiliations of four scientific professionals who would be suitable to review the contents of the submitted manuscript. Authors are asked to exercise good judgment in making their suggestions. 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 or partner journal and suggest that the authors consider transferring the submission. [Manuscript Transfer](#) simplifies and shortens the process of submitting to another ACS journal or partner journal, as all the coauthors, suggested reviewers, manuscript files, and

responses to submission questions are copied 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.

PRODUCTION AND PUBLICATION

Proofs via ACS Direct Correct

Correction of the galley proofs is the responsibility of the Corresponding Author. The Corresponding Author of an accepted manuscript will receive e-mail notification and complete instructions when page proofs are available for review via [ACS Direct Correct](#). Extensive or important changes on page proofs, including changes to the title or list of authors, are subject to review by the editor.

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 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.

ASAP Publication

Manuscripts will be published on the “ASAP Articles” 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 the ACS Publishing Center 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.

Sharing Your Published Article

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 published work](#).

Publishing open access makes it easy to share your work with friends, colleagues, and family members. In addition, ACS Publications makes it easy to 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 or partner 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 Researcher Resources account and visit the "My Published Manuscripts" page.

Reprints

[Article](#), [journal](#), and [commercial](#) reprints are available to order.

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](#).

OFAC Compliance

As a U.S.-based non-profit organization, the American Chemical Society (ACS) is required to comply with U.S. sanctions laws and regulations administered by the [U.S. Treasury Department's Office of Foreign Assets Control](#) (OFAC). While these laws and regulations permit U.S.-based publishers like ACS to engage in publishing-related activities with authors located in sanctioned regions in many cases, ACS may be prohibited under U.S. law from engaging in publishing-related activities in some cases, including, but not limited to, instances where an author or the institution with which an author is affiliated is located in a particular sanctioned region or has been designated by OFAC as a [Specially Designated National](#) (SDN) pursuant to certain U.S. sanctions programs. ACS reserves the right to refrain from engaging in any publishing-related activities that ACS determines in its sole discretion may be in violation of U.S. law.

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 a full article and included in the main text of a communication or letter. Statement examples can be found in the [Safety Statement Style Sheet](#) and additional information on communicating safety information from the *ACS Guide to Scholarly Communication* [is freely available here](#).

Conflict of Interest Disclosure

A statement describing any financial conflicts of interest or lack thereof is published in each ACS journal and partner 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.”

Plagiarism

In publishing only original research, ACS is committed to deterring plagiarism, including self-plagiarism. ACS Publications uses CrossCheck's iThenticate software to screen submitted manuscripts for similarity to published material. Note that your manuscript may be screened during the submission process.

Further information about plagiarism can be found in Part B of the [Ethical Guidelines to Publication of Chemical Research](#). See also the [press release](#) regarding ACS' participation in the CrossCheck initiative.

Authorship, Author List, and Coauthor Notification

Authors are required to obtain the consent of all their coauthors prior to submitting a manuscript. The submitting author accepts the responsibility of notifying all coauthors that the manuscript is being submitted.

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 the submission system. (Note that coauthors are not required to register in the ACS Publishing Center.) Author affiliation should reflect where the work was completed, even if the author has since left that institution. Authors may include a note with a current address if their institution has changed since the work was completed.

To expedite the processing of your manuscript, please format your author and affiliation information according to the guidelines in this [document](#).

Criteria for authorship can be found in Part B of the [Ethical Guidelines to Publication of Chemical Research](#). Artificial intelligence (AI) tools do not qualify for authorship. As non-person entities, these tools can neither take responsibility for published content, nor can they assent to co-authorship. The use of AI tools for text or image generation should be disclosed in the manuscript within the Acknowledgments section with a description of when and how the tools were used. For more substantial use cases or descriptions of AI tool use, authors should provide full details within the Methods or other appropriate section of the manuscript. The authors of the work are responsible for all submitted content and agree upon submission that generated content from AI tools is appropriate, both scientifically and based on the [Ethical Guidelines to Publication of Chemical Research](#). For more information on use of AI, please review the [ACS AI Best Practices and Policy](#).

Any changes to the authorship after initial submission require the completion of an [authorship change form](#). Confirmation that all authors (including those being added or removed) agree to the changes is required via the signed form. Please note that exceptions will not be made for large authorship lists and/or large numbers of changes. Authors must also provide a reason for each change and should explain how any added co-author(s) meet the authorship criteria as defined in the [Ethical Guidelines to Publication of Chemical Research](#). Authorship changes are subject to editorial approval and insufficient and/or inappropriate reasons for changes may result in manuscript rejection. In general, the addition of new authors will be deemed inappropriate unless fully explained and justified in the context of their scientific contributions to the work. Authorship changes post-acceptance will generally not be considered except in rare circumstances with full justification. For more information, please refer to the Authorship Changes section of the [Authorship Guidance & Policies](#).

Authors with a single name: If you, or any of your coauthors, have only one name, please follow these steps for proper submission to the ACS Publishing Center:

1. First (Given) Name Field: Enter an asterisk (*) into the "First (Given) Name" field.
2. Last (Family) Name Field: Enter your single name into the "Last (Family) Name" field.

If your paper is accepted, the asterisk (*) will be removed from the published version of the paper.

Patent Activities and Intellectual Property

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

Open Researcher and Contributor ID (ORCID)

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 Publishing Center 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.

ORCID iDs should not be typed into the manuscript. ACS publishes only those ORCID iDs that have been properly verified and linked **before the manuscript is accepted**. After your ORCID iD is linked, it will be displayed automatically in all subsequently accepted manuscripts for any/all ACS journals. We do not publish ORCID iDs provided during proof review or via other communications after a manuscript is accepted for publication.

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 Publishing Center account, you may do so by clicking on "Profile" from your ACS Publishing Center dashboard and following the ORCID-related links. Learn more at www.orcid.org.

Copyright and Permissions

To obtain forms and guidelines for completing the Journal Publishing Agreement or obtaining permissions from copyright owners, and to explore a Copyright Learning Module for chemists, click [here](#).

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 the submission system and in your manuscript to meet this requirement.

Open Access Compliance

ACS offers options by which authors can fulfill the requirements for open access and deposition into repositories for funded research. Visit our ACS Open Science site to see [how to fulfill requirements for specific funders](#) and to find out if you are eligible to publish under a [Read + Publish agreement](#) between ACS and your institution. You can also find out more about [Open Access Compliance](#) and [ACS Open Science initiatives](#).

Diversity and Inclusion Statement

During manuscript submission, ACS journal authors have the option to submit a statement sharing information related to diversity and inclusion that is relevant for their paper. If supplying a diversity and inclusion statement, the corresponding author must provide this on behalf of all authors of the manuscript during the submission process. These statements include but are not limited to analysis of citation diversity and acknowledgment of indigenous land on which research was conducted. Statements expressing political beliefs are not permitted and may be removed by the journal office. All statements are subject to final review by the Editor.

- **Citation Diversity Statement:** The citation diversity statement should appear in the Acknowledgements section of the manuscript. ACS recommends including the following: (1) the importance of citation diversity, (2) the proportion of citations by gender and race/ethnicity for the first and last authors, (3) the method used to determine those proportions and its limitations, and (4) steps taken by the authors to improve citation diversity in the article. We recognize that one limitation of the current methods is that it cannot account for intersex, non-binary, and transgender people, or Indigenous and mixed-race authors. (Adapted from [BMES/Springer Guidelines](#))
- **Land acknowledgment:** The land acknowledgment statement should appear in the Acknowledgements section of the manuscript. The statement should link to the institutions' formal land acknowledgments on which the research took place, if possible. Further guidance for creating these statements can be found here: <https://nativegov.org/news/a-guide-to-indigenous-land-acknowledgment/>.

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 additional cost to the author. Graphics intended to appear in black and white or grayscale should not be submitted in color.

Avoid relying on color alone to represent information. Use indicators such as symbols, text labels, or patterns to ensure the data is accessible to those with color vision deficiency or other visual conditions. If color is necessary to understand data, such as in heat maps or fluorescence images, choose accurate and accessible color combinations. For additional guidance and suggested color schemes, see [How to Make Scientific Figures Accessible to Readers with Color-Blindness](#) and [Coloring Chemistry—How Mindful Color Choices Improve Chemical Communication](#).

Ensure the content within graphics has sufficient contrast against adjacent colors, including the background. Contrast ratios measure the difference in brightness between two adjacent colors, helping make text and images readable. The Web Content Accessibility Guidelines (WCAG) define [minimum contrast requirements](#) of 4.5:1 for text and 3:1 for nontext elements, with [some exceptions](#) for elements like large text.

Two tools to measure contrast are TPGi's [Colour Contrast Analyzer](#) and Web Accessibility in Mind's [Contrast Checker](#). To improve low contrast, increase the saturation of one of the colors, or use borders or other visual separators between adjacent colors. For additional information and examples, see [Color to convey meaning](#) and [Choosing color in data visualizations](#) in the ACS Inclusivity Style Guide.

Type of Graphics

Table of Contents (TOC)/Abstract Graphic

Consult the Guidelines for [Table of Contents/Abstract Graphics](#) for specifications.

Our team of subject-matter experts and graphical designers can also help generate a compelling TOC graphic to convey your key findings. Learn more about our [Graphical Abstract service](#).

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 their 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, so avoid merging or splitting cells.

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

ACS Chemical Health & Safety authors are encouraged to submit images to be considered for use on the journal's front cover or [Supplementary Covers](#) at the time of the submission of their revised manuscript. If your article is accepted for publication, your suggestion may also be selected for use on one of the journal's covers. If your art is selected for front cover, ACS will send you information about how to request one complimentary 18" by 24" printed poster featuring your work. Images chosen for the front cover will be published at no cost to the author.

Cover image submissions should be colorful and visually engaging, with minimal text. The cover image should not resemble a graphical abstract or data figure, but rather should be an artistic and scientifically accurate representation of the manuscript.

Image files should be submitted as TIF, JPG, PNG or EPS files with a resolution of at least 300 dpi for pixel-based images. Images should be 8.19 in × 7.13 in. (or 20.80 cm × 18.09 cm). Authors should submit the cover image, along with a short, clear legend (less than 50 words) explaining the image, as supplementary files to the ACS Publishing Center with their revised manuscript. Any use of AI tools must comply with [ACS Artificial Intelligence Best Practices](#) and be disclosed in the cover caption. For any questions about AI use in cover art, please contact ACSPubsMultimedia@acs.org.

If you wish to be considered only for the front cover, and not a paid supplementary cover, please respond NO accordingly to the Supplementary Cover Art question in the submission system. For more information on the Supplementary Covers program, [please see this webpage](#). All art submitted for consideration for a supplementary cover will also be considered for a front cover.

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 the submission system with 'Web Enhanced Object' selected as the file designation. Consult the list of [compatible WEO formats](#).