



## FRONTIERS OF CHEMICAL SCIENCE AND ENGINEERING

Guide for Authors (June, 2023)

### 1 General Information

*Frontiers of Chemical Science and Engineering* is an international peer-reviewed academic journal sponsored by the Ministry of Education of China. The journal is administered by Higher Education Press, Chinese Academy of Engineering and Tianjin University, jointly published by Higher Education Press and Springer-Verlag on a monthly basis in English. Online versions are available at <https://link.springer.com/journal/11705/volumes-and-issues> or <http://journal.hep.com.cn/fcse>.

#### 1.1 General

All contributions should conform to the Aims and Scope shown at the front of the journal. The Editors welcome contributions to new topics that fall within the broad scope of Chemical Science and Engineering.

#### 1.2 Ethical Responsibilities of Authors

This journal is committed to upholding the integrity of the scientific record. As a member of the Committee on Publication Ethics (COPE) the journal will follow the COPE guidelines (<http://publicationethics.org/resources/guidelines>) on how to deal with potential acts of misconduct.

#### 1.3 Disclosure of Potential Conflict of Interests

A conflict of interest may exist when an author or the author's institution has a financial or other relationship with other people or organizations that may inappropriately influence the author's work. A conflict can be actual or potential and full disclosure to the Journal is the safest course. All submissions to the Journal must include disclosure of all relationships that could be viewed as presenting a potential conflict of interest. The Journal may use such information as a basis for editorial decisions and may publish such disclosures if they are believed to be important to readers in judging the manuscript. A decision may be made by the Journal not to publish on the basis of the declared conflict.

#### 1.4 Statement of Human and Animal Rights

When reporting studies that involve human participants, authors should include a statement that the studies have been approved by the appropriate institutional and/or national research ethics committee and have been performed in accordance with the ethical standards as laid down in the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards. If doubt exists whether the research was conducted in accordance with the 1964 Helsinki Declaration or comparable standards, the authors must explain the reasons for their approach, and demonstrate that the independent ethics committee or institutional review board explicitly approved the doubtful aspects of the study.

#### 1.5 Articles Types

**Research articles** should be complete and authoritative accounts of work which have special significance, general interest and which are presented clearly and concisely. Research articles should be in the range of 8–12 journal pages in length. In research articles, author's self-citation rate should not exceed 20%.



**Review articles** In addition to undergoing the same rigorous level of technical peer-review as Research articles, Review articles will be critiqued based on the general impact of the field being reviewed, the relevance of the field to experimental mechanics, preexisting reviews of the field, and acknowledgement of the contributing author as a dominant figure in the field. Review articles typically occupy 10–15 journal pages. In review articles, author's self-citation rate should be lower than 25%.

**Communications** dealing with new ideas and specific points rather than developing a theme, and should not exceed 4 journal pages.

**Views & Comments** presenting important views and comments on keys issues, significant progress, or crucial problems that need to be solved, and may be submitted by invitation. For the length of Views & Comments, up to 3 pages can be accepted. It could also include no more than three figures/tables and have less than 10 references. Note: in formatted papers, there are 600 words in each journal page on average (figures, tables, references and footnotes are included).

## 2 Submission of Manuscripts

Authors can submit their papers via the online submission system: <http://mc.manuscriptcentral.com/fcse>, the Chief Editor and one of the Associate Editors with whom the author can communicate efficiently or whose expertise covers the content of the paper. Submit your manuscript as a **Word** file. Other file types are not suitable for production. It is important that the file be saved in the native format of the wordprocessor used. All correspondence, including the editor's decision and request for revisions, will be by e-mail. After reviewing process, the manuscript will be finally judged by one of the editors who have the right to accept or reject a paper.

### 2.1 Cover Letter

Authors must submit a cover letter that clearly states the significance of the work presented in their manuscript. The Abstract and Conclusions section must also highlight what is new and/or novel in the paper.

### 2.2 Manuscript Preparation

The following components are required for a complete manuscript: Title, Author(s), Author affiliation(s), Abstract, Keywords, Main text, References, Acknowledgements, Nomenclature (when needed), and Appendices. Electronic Supplementary Materials should be uploaded separately. Include page numbers on the document, beginning with the title page as number 1. It will be preferred if line numbers are included as well.

Please use standard 10- or 12-point Times New Roman fonts.

**Title** The title of the paper should be explicit, descriptive and as brief as possible—no more than 20 words in length.

**Running title** A short version of the paper title (up to 80 characters including space).

### Author name and affiliation

Example:



## Frontiers of chemical science and engineering

First Name Last Name(✉)<sup>1,2</sup>

1 Higher Education Press, Beijing 100029, China

2 School of Chemical Engineering and Technology, Tianjin University, Tianjin 300072, China

## E-mail for corresponding author

**Corresponding author** The name and the e-mail address of the corresponding author should be given on the first page of the manuscript. In the case of multiple authors, one should be designated as the corresponding author.

**Abstract** A short abstract of up to 300 words written in one paragraph, clearly indicating the object and scope of the paper as well as the results achieved, should appear on the first page.

**Keyword** Up to 6 words separated by commas.

**Heading and subheading** Headings and subheadings should be used throughout the text to divide the subject matter into its important, logical parts. Typical headings include: Introduction, Experimental , Results, Discussion, Conclusions, Acknowledgments, Appendixes and References.

## Table

Table requirements

Authors should take notice of the limitations set by the size and layout of the journal. Large tables should be avoided. Reversing columns and rows will often reduce the dimensions of a table. If many data are to be presented, an attempt should be made to divide them over two or more tables.

Example:

Table 1 Table title

Sample	2/h	4/h	6/h
Blank control	61.5	71.4	68.0
PLA <sup>a)</sup>	73.2	75.6	65.2
HA-PLA <sup>b)</sup>	54.4	78.6	62.4

a) PLA:\*\*\*\*\*; b) HA-PLA: \*\*\*\*\*

(1) Supply units of measure at the heads of the columns. Abbreviations that are used only in a table should be defined in the footnotes to that table.

(2) Should always use rows and columns to correlate two variables. Submitted single-spaced and in the word processing software used.

(3) Submitted as three-line tables, that is, there are three horizontal lines: one under the legend, one under the column heads, and one below the body. Vertical lines are generally not used.



(4) Label each table at the top with a Roman numeral followed by the table title. Insert explanatory material and footnotes below the table. Designate footnotes using lowercase superscript letters (<sup>a</sup>), (<sup>b</sup>), (<sup>c</sup>) reading horizontally across the table.

(5) Must be sequentially numbered and called out in the text as, e.g., Table 1.

(6) Tables should be embedded in the corresponding place of the text. Do not list tables in a separate page.

### Illustration

Graphs should be practically self-explanatory. Readers should be able to understand them at a glance. Dimensional drawings and diagrams should include only the essential details and as little lettering as possible. They should present more of a picture than a working drawing.

Requirements:

(1) **Size** Figures should be drawn in the size of the virtually appear.

(2) **Numbering and title** number all figures (graphs, charts, photographs, and illustrations) in the order of their citation in the text and cited as, e.g., Fig. 1. Include a title for each figure (a brief phrase, preferably no longer than 10 to 15 words). Use (a), (b), (c)... to give titles for subfigures if there are any.

- Labelled atoms in ORTEP (or other) diagrams should have (selected) atom numbers in parentheses, e.g., Cl(1), C(12).
- For graphs, axis labels should use SI units, separated from quantities with a solidus (/) not parentheses, e.g.,  $\lambda/\text{nm}$ , percent/%.
- Units should be in the form, e.g.,  $\text{g}\cdot\text{cm}^{-3}$  rather than  $\text{g}/\text{cm}^3$ .
- Symbols representing physical quantities should be given in italics, e.g.,  $E$ ,  $t/s$ .

(3) **Figure quality** Figures should be supplied as electronic files with high quality.

(4) **Color of figure** Color should only be used where scientifically necessary. Otherwise, better drawn in black and white for line-drawing; and grayscale for images.

(5) **Text in illustrations** Curves should be labeled (A), (B), (C) etc. and parts of figures (a), (b), (c) etc., and further information given in the figure legend.

(6) **Figure location** Figures should be embedded in the corresponding place of the text. Do not list figures in a separate page.

(7) **Figure formats** The scale of the coordinate axis should be set inward but not outward. The font of coordinate variables should be Times New Roman and only the initial letter is capital.

(8) **Copyright** Take care of any copyright issues regarding the figures. Please make sure you obtain permission to use copyrighted figures. In addition, they should be cited clearly.



### Formulae and equation

(1) Structural formulae should ideally be prepared with chemistry drawing software (e.g., Chem Draw, Chem Windows, ISIS/Draw), using the settings given below.

- Chain bond angle =  $120^\circ$
- Fixed bond angle =  $15^\circ$
- Bond length = 0.43 cm or 12.2 pt
- Bond width = 0.016 cm or 0.5 pt
- Bold bond width = 0.056 cm or 1.6 pt
- Double bond space = 20% of bond length
- Stereo bond width = 0.056 cm or 1.6 pt
- Hash spacing = 0.062 cm or 1.8 pt
- Captions/atom labels = Arial/Helvetica, 7 pt

Number structures with bold arabic numerals, e.g., **1**, **2**. Schemes and structures should be drawn to make best use of single and double column widths.

(2) It is extremely important that all mathematical symbols and letters used are identified and listed and that the required style of appearance of such symbols is clearly indicated, e.g., bold face, italics, script, outline, etc.

(3) Subscripts and superscripts should be set off clearly.

(4) Identify in the margin Chemical any symbols that might be confused with similar symbols.

(5) The words Equation or Equations should appear in full at the beginning of sentences but be abbreviated to Eq. or Eqs. elsewhere.

(6) A nomenclature can be included (with the use of = signs) after the abstract if there is a significant number of symbols in the paper.

(7) Equations should be located separately from other lines if they are long or complicated.

(8) Equations and formulae should be edited by formula editor.

**Abbreviation** Abbreviations should be used sparingly. Please follow the terms below.

(1) Do not use abbreviations in the title or abstract.

(2) The complete terms should be given in parentheses the first time you use them; Make sure that the complete terms appear only for the first time.

(3) Do not use abbreviations for short names, including the names of individual compounds, e.g., acetonitrile (ACN), wavelength (WL), deionized water (DW).

(4) If the abbreviation only appears once in the main text, it is unnecessary to use the abbreviation.

**Footnote** Footnotes should only be used if absolutely essential. In most cases it will be possible to incorporate the information in normal text.

If used, they should be numbered in the text, indicated by superscript numbers, and kept as short as possible.



**Units of measure** Laboratory values are expressed using conventional units of measure, with relevant Système International (SI) conversion factors expressed secondarily (in parentheses) only at first mention. In tables and figures, a conversion factor to SI should be presented in the footnote or legend. The metric system is preferred for the expression of length, area, mass, and volume. For more details, see the Units of Measure conversion table (absent).

**Acknowledgment** The "Acknowledgment section" is the general term for the list of sponsor and financial support, contributions, credits, and other information included at the end of the text of a manuscript but before the references. Conflicts of interest and financial disclosures must be listed in this section. Authors should obtain written permission to include the names of individuals in the Acknowledgment section.

#### Appendix (if needed)

Appendix A

A1, A2, A3...

Appendix B

Appendix C...

#### Citation and Reference

In-text citations must agree with the references in either numbering or names and year. The references should be presented completely and without mistakes, and should be the original publication. It should be listed in numerical order in the order in which they are cited in the text. Give the complete information, including names of all authors, titles of the article and periodicals or books, publication years, volumes, number, start and end pages. Journal title should be in complete but not in abbreviation. Examples follow:

##### Reference for journal

Lächelt U, Wagner E. Invading target cells: Multifunctional polymer conjugates as therapeutic nucleic acid carriers. *Frontiers of Chemical Science and Engineering*, 2011, 5(3): 275–286

##### Reference for book

Hofbauer J, Sigmund K. *The Theory of Evolution and Dynamical Systems*. London: Cambridge University Press, 1988, 25–27

##### Reference for dissertation

Chen B. Theoretical studies of dielectronic recombination for Be-like titanium, molybdenum, gold and lead ions and spectrum for highly ionized titanium and gold atoms. Dissertation for the Doctoral Degree. Chengdu: Sichuan University, 1998, 99–100

##### Reference for patents

Plank C J, Posinski E J. US Patent, 4081190, 1978-02-15

The digital object identifier (DOI) may be used to cite and link to electronic documents. Consisting of a unique alpha-numeric character string which is assigned to a document by the publisher upon the initial electronic publication, DOI is an ideal medium for citing a document, particularly "Articles in press" because they have not yet received their full bibliographic information. The correct format for citing a DOI



is shown as follows (example taken from a document in the Communications in Nonlinear Science and Numerical Simulation):

DOI 10.1007/s11705-000-0000-0

### Online materials

The online materials are not recommended to be cited as references. It is better to use other types of references instead.

### Notification

The corresponding author will be notified by the editors of the acceptance of article and invited to supply an electronic version of the accepted text, if this is not already available.

## 2.3 Referee

All papers will be independently refereed. When submitting a paper authors are requested to suggest **5** potential referees, supplying the full name, address, e-mail and research field in each case. Authors may also suggest reviewers they do not want to review their manuscript, but the reasons for doing so should be stated. In either case, the final choice of referees will remain entirely with the Editor.

## 2.4 Copyright Transfer

No article can be published unless accompanied by a signed Copyright Transfer Statement, which ensures a transfer of copyright from author to publisher. A copy of the Copyright Transfer Statement to be used will be provided with the letter of acceptance of the manuscript. Authors are asked to scan and return by email or fax the signed statement to the editorial office of *Frontiers of Chemical Science and Engineering*.

## 2.5 Publication

### 2.5.1 Proof

Proof will be sent to the author and should be returned within 72 hours of receipt. Authors should clarify any questions of the proof in a query file. No new materials shall be inserted at the time of proofreading. Please note that authors are urged to check their proofs carefully before return one all-inclusive e-mail or fax, since subsequent additional corrections will not be possible.

### 2.5.2 Author Benefit

Manuscripts enjoy a fast peer-review and production workflow. Once accepted manuscripts can get polished in language by highly qualified editors before typeset. Manuscripts for publication in FCSE will be posted on Springer in the Web edition of the journal as soon as they are ready for publication (that is, when page proofs are corrected and all author concerns are resolved).

## 2.6 Research Data Policy

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- [Research Data Policy](#)

General repositories - for all types of research data - such as figshare and Dryad may also be used.

Datasets that are assigned digital object identifiers (DOIs) by a data repository may be cited in the reference list. Data citations should include the minimum information recommended by DataCite: authors, title, publisher (repository name), identifier.

- [DataCite](#)

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- [Helpdesk](#)

If you have any questions about the online submission process, you may also contact the Journal Editorial Office:

School of Chemical Engineering and Technology, Tianjin University, Tianjin 300072, China

E-mail: [fcse@tju.edu.cn](mailto:fcse@tju.edu.cn)

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