Pure and Applied Chemistry

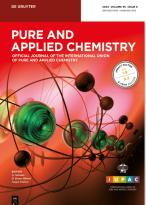


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Scope and general policies of the journal

Scope

Pure and Applied Chemistry is the official monthly journal of the International Union of Pure and Applied Chemistry (IUPAC). It publishes the society's recommendations on chemical terminology, nomenclature, symbols and units, as well as data standards. In addition, the journal publishes original research at the forefront of all aspects of pure and applied chemistry, often arising from IUPAC scientific events and IUPAC prize awardees.

Article (manuscript) categories

Manuscripts fall into two broad categories: 1) IUPAC **Technical Reports** and **Recommendations** and 2) original **Research Articles**, **Reviews**, and **Perspectives**. These two categories differ in manuscript ppreparation and review (for details, see below). In addition, specific journal issues may contain an **Editorial** and **Preface**.

1) Technical Reports and Recommendations

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- **Technical Reports** include the compilation and critical evaluations of data, or of parameters and equations; the critical assessment of methods and techniques; guidelines for the presentation of methods of analysis or for the calibration of instruments; determinations of specific elements or compounds in selected samples in special environments; studies of the biodegradability of materials; chemical process control aspects; and evaluations of properties of specific materials.
- **Recommendations** include studies on nomenclature, symbols, terminology, or conventions, and their purpose is to recommend unambiguous, uniform, and consistent nomenclature and terminology for specific scientific fields. They are usually presented as glossaries of terms for specific chemical disciplines; definitions of terms relating to a group of properties; nomenclature of chemical compounds and their classes; terminology, symbols, and units in a specific field; classifications and uses of terms in a specific field; and conventions and standards of practice for presenting data in a specific field.

2) Research Articles, Reviews, and Perspectives

Research Articles, Reviews, and Perspectives often arise from IUPAC endorsed conferences or IUPAC prize awards. However, they are not limited to such outputs, and we invite submission of high-quality manuscripts from the global scientific community in all areas of pure and applied chemistry. There are no word limits for these manuscripts or restrictions on the number of accompanying figures or illustrations.

- **Research Articles** present the author's original research in the format of short communications or full papers. Although not obligatory, manuscripts will typically contain an Introduction followed by Results and Discussion, Conclusions, Materials and Methods and References. The experimental section must provide full details of all procedures and characterization data for novel materials, some of which may be placed separately in a Supporting Information document.
- **Review Articles** provide an authoritative and critical summary of scientific developments in a specific area of chemistry. They should not overlap significantly with other recently published overviews.
- **Perspectives** are similar to reviews but focus on the author's own work placed in the context of a wider field of research.

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Instructions for Authors

Pure and Applied Chemistry

Peer review and preprint policies

Peer review information

Peer Review of Research and Review Articles

Pure and Applied Chemistry is a single-blind journal. Manuscripts are reviewed anonymously by at least two independent reviewers selected by the Editors. The authors may provide the names, institution, country, and e-mail addresses of up to four potential reviewers. Reviewers indicated by the authors must be from different institutions than the corresponding author. Authors may also provide names of reviewers they wish to exclude from reviewing their manuscripts. The editors reserve the right to reject submitted manuscripts without peer review if the studies are deemed to be of insufficient originality or limited interest to the journal's target audience.

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The peer review of Technical Reports and Recommendations is conducted in a manner to ensure that the widest possible consensus has been reached among all IUPAC Divisions and other bodies of the Union, between IUPAC and other standardizing organizations including the International Council for Science (ICSU) and the Conférence Générale des Poids et Mesures (CGPM) and its Committees. More details on the reviewing process can be found in <u>Kaiser et al. 2022</u>.

Prior to submission, a written approval by the sponsoring IUPAC Division President(s) (DP approval) must confirm the manuscript has satisfactorily completed Division review. After approval, the authors will be invited to submit their manuscript online to *Pure and Applied Chemistry*. Once the Editor decides the manuscript is suitable, it will be internally reviewed by the IUPAC Interdivisional Committee on Terminology, Nomenclature and Symbols (ICTNS) for consistency of terminology, nomenclature and symbols usage with current IUPAC standards and externally by experts in academia and industry (up to 15 in case of Recommendations; up to 5 for Technical Reports). The Editor has the final responsibility for accepting or rejecting the manuscript which may undergo several iterations and revisions. An accepted Technical Report directly proceeds to journal publication. In contrast, once the draft of an accepted Recommendation is checked by the Editor and the authors, it is published as a Provisional Recommendation on a dedicated webpage for public review and comment. This allows the IUPAC National Adhering Organizations (NAOs) a period of four months' public review during which the Provisional Recommendation should not be quoted publicly. The author(s) will revise the Provisional Recommendation in the light of the comments received during the public review phase and submit a revised manuscript for final review by ICTNS members and the Division President.

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Acknowledgments

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1. Foster, J. C.; Varlas, S.; Couturaud, B.; Coe, J.; O'Reilly, R. K. Getting into Shape: Reflections on a New Generation of Cylindrical Nanostructures' Self-Assembly Using Polymer Building Block. *J. Am. Chem. Soc.* **2019**, *141* (7), 2742–2753. https://doi.org/10.1021/jacs.8b08648. Article title allowed, not mandatory.

• Epub ahead of print (DOI)

5. Shah H. H.; Stratz S.; Hauser P. C. Electro-Driven Extraction Across a Polymer Inclusion Membrane in a Flow-Through Cell. *J. Chromatogr. A* **2013**. https://doi.org/10.1016/j.chroma.2013.01.062

• Journal – in press/forthcoming

6. Tang D.; Jankowiak R.; Small G. J.; Tiede D. M. Deepoxy T-2 Tetrol: A Metabolite of TO2 Toxin Found in Cow Urine. *Chem. Phys.*, in press.

• Book/monograph

7. Wertheimer A. I.; Norris, J. Chemometrics with R; Springer: London, 2011.

• Book with edition

8. King Lester S. Why Not Say It Clearly: A Guide to Scientific Writing, 2nd ed.; Little, Brown: Boston, MA, 1991.

• Edited book

9. Warren B. K.; Oyama S. T.; Eds. *The Chemistry of the Atmosphere: Oxidants and Oxidation in the Earth's Atmosphere*; Royal Society of Chemistry: Cambridge, England, 1995.

• Edited book with chapter title (and editors)

10. Laidlaw I.; Steinmetz M. Introduction to differential sedimentation. *In Analytical Ultracentrifugation: Techniques and Methods*; Scott D. L., Harding S. E., Rowe A. J., Eds. Royal Society of Chemistry: Cambridge, 2005; pp. 270–290.

• Book series

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$$k(T) = A \exp(-E_A / RT)$$

(1)

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p = 0.123 mbar = 12.3 Pa = 12.3 N m⁻² or p/Pa = 12.3r = 2.13 Å = 0.213 nm or r/nm = 0.213 $k = 10^{8.2}$ s⁻¹ or lg(k/s^{-1}) = 8.2

Note particularly the use of an italic font for quantity symbols such as p, r, and k, and the use of an upright font for unit symbols such as Pa, mbar, m, nm, and s. The format "quantity symbol divided by the unit" as in r/nm = 0.213, is particularly convenient for heading the columns of tables and labeling the axes of graphs, so that the entries in the table columns or the labels on the tick marks of the graph may be pure numbers. The symbols lg and ln should be used for \log_{10} and \log_{e} , respectively.

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