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DESCRIPTION

The *Journal of Chemical Thermodynamics* exists primarily for dissemination of significant new knowledge in experimental **equilibrium thermodynamics** and transport properties of **chemical systems**. The defining attributes of The Journal are the quality and relevance of the papers published.

The Journal publishes work relating to gases, liquids, solids, polymers, mixtures, solutions and interfaces. Studies on systems with variability, such as biological or bio-based materials, gas hydrates, among others, will also be considered provided these are well characterized and reproducible where possible. Experimental methods should be described in sufficient detail to allow critical assessment of the accuracy claimed.

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INTRODUCTION

General

Please consult this Guide for Authors for further details on the requirements for submitting your paper to *The Journal of Chemical Thermodynamics*. The guidelines described in this document, as well as those listed in the JCT Style Notes, should be carefully adhered to ensure high-quality and rapid publication of your manuscript.

Aims and Scope

The Journal of Chemical Thermodynamics exists primarily for dissemination of significant new measurements in experimental thermodynamics and thermophysics including bio-thermodynamics, calorimetry, phase equilibria, equilibrium thermodynamic properties and transport properties.

The Journal publishes work relating to gases, liquids, solids, mixtures, solutions, interfaces, including polymers and biological materials, provided that the systems studied are characterised and reproducible.

The defining attributes of The Journal are the quality and relevance of the papers published. Authors are expected to describe their methods and present their results in sufficient detail to allow critical assessment of the accuracy claimed.

Further, The Journal welcomes theoretical papers reporting on thermodynamics using molecular theory or modeling, provided the relationship with experiment is clearly described. Review articles will also be considered but prospective authors should first consult one of the Editors concerning the suitability of the proposed review.

Experimental measurements of a routine nature or those conducted on uncharacterised materials are not accepted.

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Divide the article into clearly defined sections.

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Results should be clear and concise.

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The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

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If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

Style Requirements

Symbols, Units and Equations

1. Symbols and terminology must follow the recommendations of IUPAC (see: *Quantities, Units and Symbols in Physical Chemistry*, third ed.; RSC Publishing, Cambridge 2007, ISBN 0 85404 433 7).
2. SI units should be used throughout.
3. The algebra of quantities must be followed. Accordingly, the symbol for a physical quantity represents a pure number multiplied by a unit or combination of units.
4. Each physical quantity must be represented by a single symbol which may be decorated with subscript or superscript characters.
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6. Symbols should be defined in the text when they are first used, and also in figure and table legends.
7. Equations must always be dimensionally consistent. Equations used to correlate experimental data may be best in a dimensionless form.

Example

YJCHT_ST_2.JPG

8. The arguments of logarithmic, exponential and trigonometric functions must be dimensionless: e.g. $\ln(p/\text{MPa})$ or $\ln(p/p_0)$ but not $\ln(p)$.
9. Equations, when displayed, should be centred and numbered, flush right, in parenthesis eg

YJCHT_ST_3.JPG (1)

10. Always puncture after an equation to place it correctly within the sentence that contains it (see example above).
11. Wherever possible set equation and expressions on a single line: e.g.: dp/dT not YJCHT_ST_4.JPG

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12. When reporting experimental results, the uncertainty of each measured quantity should be reported and combined in quadrature to obtain the uncertainty of any derived quantities (see <http://physics.nist.gov/cuu/>).
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20. Fractional deviations and similar quantities should be plotted as, e.g., $102(X-XC)/XC$; do not use 'ppm', 'per cent', '%' or similar abbreviations.
21. Plotting symbols only should be used to represent experimental data or discretely computed quantities. Smooth lines or curves only should be used to represent values computed from formulae or other continuous data (e.g. g.l.c. trace).
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23. Similar figures should be plotted in identically-sized frames.
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25. Include error bars where appropriate but only when they exceed the size of the plotting symbols.

Example figure and legend text

YJCHT_ST_5.JPG

FIGURE 1. (a) Densities ρ of pentafluoroethane at temperatures T : \square , saturated liquid; \bullet , saturated vapour; -----, saturated vapour and liquid calculated from Eq. (4). (b) Deviations of experimental saturated liquid densities ρ_1 from values ρ_{calc} calculated from Eq. (4).

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26. Number tables consecutively in accordance with their appearance in the text.
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29. Footnotes may be cited using lower-case Roman superscripts (e.g. a,b). Define the footnotes at the base of the table.
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33. Missing entries in a table should be shown as blanks.

Example table and legend text

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[1] J. van der Geer, J.A.J. Hanraads, R.A. Lupton, The art of writing a scientific article, *J. Sci. Commun.* 163 (2010) 51–59.

Reference to a book:

[2] W. Strunk Jr., E.B. White, *The Elements of Style*, fourth ed., Longman, New York, 2000.

Reference to a chapter in an edited book:

[3] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), *Introduction to the Electronic Age*, E-Publishing Inc., New York, 2009, pp. 281–304.

Reference to a website:

[4] Cancer Research UK, Cancer statistics reports for the UK. <http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/>, 2003 (accessed 13.03.03).

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[dataset] [5] M. Oguro, S. Imahiro, S. Saito, T. Nakashizuka, Mortality data for Japanese oak wilt disease and surrounding forest compositions, *Mendeley Data*, v1, 2015. <https://doi.org/10.17632/xwj98nb39r.1>.

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