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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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622860jct.gif

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Please consult the *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.
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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.

The Journal of Chemical Thermodynamics, along with other journals in the field, cooperates with the Thermodynamics Research Center (TRC) of the National Institute of Standards and Technology (NIST) for the purpose of ensuring the quality of published experimental data. This collaboration relates to articles that report experimental measurements falling within the scope of the NIST ThermoML Archive (http://www.trc.nist.gov/ThermoML.html) and has two elements. First, upon submission of an article, NIST will provide a literature report to the authors and reviewers containing relevant references from the NIST Data Archive. Second, NIST will provide a data evaluation at the end of the review process immediately prior to acceptance of the article. This data evaluation will compare the reported experimental data with that existing in the NIST Data Archive and highlight any unexpectedly large discrepancies such as those arising from typographical errors. In order to facilitate the necessary electronic data capture, the experimental results and their uncertainties must be tabulated as described in this Guide (see also http://trc.nist.gov/JCT-Support.html).
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Style Requirements
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4. Each physical quantity must be represented by a single symbol which may be decorated with subscript or superscript characters.
5. The symbol for a physical quantity must appear in italic or sloping type, even when the symbol appears in a subscript or a superscript. Conversely, symbols not designating a physical quantity should appear in Roman or upright type: e.g. \( YJCHT\_ST\_1.JPG \) represents the perfect-gas molar heat capacity (italic ‘\( p \)’ for pressure, Roman ‘\( m \)’ for molar).
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Example
\( YJCHT\_ST\_2.JPG \)

8. The arguments of logarithmic, exponential and trigonometric functions must be dimensionless: e.g. \( \ln(\frac{p}{\text{MPa}}) \) or \( \ln(\frac{p}{p_0}) \) but not \( \ln(p) \).
9. Equations, when displayed, should be centred and numbered, flush right, in parenthesis eg
\( YJCHT\_ST\_3.JPG \) (1)

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14. Number figures consecutively in accordance with their appearance in the text.
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19. Only dimensionless quantities should be plotted. Axis labels must therefore be dimensionless expressions presented in correctly-formatted symbols: e.g. \( T/K \); not \( T \) (K) or Temperature/K. All symbols must be defined in the accompanying caption.
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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 $p$ of pentafluoroethane at temperatures $T$: ●, saturated liquid; •, saturated vapour; -------- , saturated vapour and liquid calculated from Eq. (4). (b) Deviations of experimental saturated liquid densities $p_1$ from values $p_{\text{calc}}$ calculated from Eq. (4).

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Example table and legend text

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