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INSTRUCTIONS TO AUTHORS

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THERMOCHIMICA ACTA

INSTRUCTIONS TO AUTHORS

GENERAL

Four types of paper will be published:

(a) *Normal-length papers* — Comprehensive description and discussion of original research investigations; the experimental techniques must be described in detail.

(b) *Reviews* — Timely critical reviews will be accepted on any aspect of thermochemistry. They may include theoretical, experimental, or instrumental subjects. Consult the Editor-in-Chief for details on extraordinarily long Reviews.

(c) *Notes* — Generally short articles dealing with topics that are less significant or comprehensive than those in normal-length papers.

(d) *Book Reviews, Announcements and Reports* — Reviews of books of interest to the area of thermochemistry written by recognized experts on the subject. A Report will deal with scientific meetings, nomenclature, new commercial instrumentation, and so on.

Papers may be written in English, French, or German and should be sent to: The Editor of Thermochimica Acta, Department of Chemistry, The University of Houston, Houston, TX 77204-5641, U.S.A. Authors should remember that the journal is international, and is widely read by those whose first language is not that in which the paper is written. Clarity and precision are best achieved by the use of short words and simple sentences.

Authors should submit manuscripts in double-spaced typing on pages of uniform size, with a margin of 2.5 cm. Typescripts are to be preceded by a sheet of manuscript paper bearing the name and address of the person to whom proofs are to be sent, indicating the number of pages in the typescript, and the numbers of tables and of illustrations. Words or letters in the text which are to be printed in italics should be underlined with lead pencil.

Papers should be headed by a concise but informative title. This should be followed by the names of the authors and by the name and address of the laboratory where the work was carried out. If the address of an author at the time at which the paper will appear is not the laboratory in which the work was carried out, this may be stated in a footnote. Acknowledgements of

financial support should not be made by a footnote to the title or name of the author, but should be included in ACKNOWLEDGEMENTS at the end of the paper.

Papers should be divided into sections, using headings (e.g. Abstract, Introduction, Experimental, Results, Discussion, Acknowledgements, References).

ABSTRACT

A Normal-length paper should have an ABSTRACT in English, on a separate sheet. This is not required for Notes. If the paper is written in French or German, the ABSTRACT should be headed by an English translation of the title. A RESUME or ZUSAMMENFASSUNG, in the same language as the paper itself, should also be added. It should comprise a brief and factual account of the contents and conclusions of the paper, as well as an indication of any new information which it may contain and of its relevance.

INTRODUCTION

A Normal-length paper should have a short INTRODUCTION. This should state the reasons for the work, with brief reference to previous work on the subject. The first paragraph of a Note should serve the same purpose but no separate section is required.

REFERENCES

The REFERENCES should be numbered in the order in which they are cited in the text and brought together at the end of the article.

The list of references should be given using double spacing on a separate sheet of the manuscript. Footnotes should not include bibliographic material. Authors should check whether every reference in the text appears in the list of references and vice versa. Numerals for references are given in square brackets [ ] in the text. Numerals referring to equations are put in parentheses ( ). Abbreviations for the titles of journals should be according to Chemical Abstracts. Expressions such as et al., idem and ibid. should not be used in the list of references: details of each reference should be given in full.

In the list of references at the end of the article the following system should be used for:

(a) Periodicals:

1 G.A. Vaughan and J.J. Swithenbank, Analyst (London), 90 (1965) 594.

(b) Books:

2 W.W. Wendlandt and J.P. Smith, The Thermal Properties of Transition Metal Ammine Complexes, Elsevier, Amsterdam, 1967, p. 14.

(c) Multi-author volumes:

3 A.J. Banister, L.F. Moore and J.S. Padley, in G. Nickless (Ed.), Inorganic Sulphur Chemistry, Vol. 1, Elsevier, Amsterdam, 2nd edn., 1968, p. 137.

TABLES AND FIGURES

Considerable thought should be given to the layout of the tables (and figures) so that the significance of the results can be most readily and quickly grasped by the busy reader. It should also be remembered that the length of a printed page is always greater than its width. Vertical lines are not used to separate the columns in tables.

Tables should be typed with double spacing on separate pages and numbered with arabic numerals. They should have headings which make their general meaning understandable without reference to the text.

Legends to figures should not be typed or written on the illustrations but typewritten in sequence *on a separate sheet of the manuscript*. The legends should begin with a title of the same type as a table heading followed by any other necessary material describing the points or lines on the figure.

Figures, numbered with arabic numerals, should be in a form suitable for reduction by a factor of two or three in the linear dimensions, and should be drawn in black waterproof drawing ink on drawing or tracing paper. The degree of reduction will be determined by the publishers, but in general the same degree of reduction will apply to all figures in the same paper. Standard symbols should be used in line drawings. The following are available to the printer and can also be used in the legends:

○ ● □ ■ △ ▲ ◇ ◆ ⊕

Each figure should bear the figure number, the name of the author and the title of the paper. Original illustrations are not returned except by special request.

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PROOF READING

Since priority is established by the date of receipt of a paper, it is essential that no new material be inserted in the text at the time of proof reading. The publisher will not accept new material unless permission from the Editor has

been obtained for the addition of a "note added in proof". This will be published with the date of receipt of the added note.

UNITS OF MEASUREMENTS

gram	g
metre	m
micron (10^{-6} m)	μm
ångström	Å
litre	l
mole (an Avogadro number of any particle, atoms, molecules, ions, electrons, etc.)	mol
molar (mole litre^{-1})	M
molal (mole kilogram^{-1})	m
normality	N
hour	h
minute	min
second	s
hertz	Hz
dyne	dyn
atmosphere	atm
poise	P
joule	J
watt	W
degree Celsius	°C
degree Kelvin (absolute)	K
coulomb	C
ampere	A
ohm	Ω
volt	V
farad	F
henry	H
electrostatic unit	e.s.u.
electromagnetic unit	e.m.u.
Debye unit	D

Prefixes to abbreviations for the names of units indicating

Multiples		Sub-multiples			
tera ($\times 10^{12}$)	T	deci ($\times 10^{-1}$)	d	nano ($\times 10^{-9}$)	n
giga ($\times 10^{9}$)	G	centi ($\times 10^{-2}$)	c	pico ($\times 10^{-12}$)	p
mega ($\times 10^{6}$)	M	milli ($\times 10^{-3}$)	m	femto ($\times 10^{-15}$)	f
kilo ($\times 10^{3}$)	k	micro ($\times 10^{-6}$)	μ	atto ($\times 10^{-18}$)	a

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REPRINTS

Fifty reprints of Normal-length papers and Notes will be supplied free. Additional reprints may be ordered by the author(s) by filling out an order form which will be sent with the proofs of the article.

ABBREVIATIONS AND SYMBOLS FOR CHEMICAL NAMES

When it is advantageous to the reader (not just to the writer), abbreviations or symbols for the names of chemical substances may be used. Should there be any doubt about a particular symbol or abbreviation, the full expression followed by the abbreviation (in parentheses) should be given the first time it appears in the text. Abbreviations used in figures should be explained in the legends; those used in tables should be explained in a footnote to the table.

BRIEF RECOMMENDATIONS FOR REPORTING THERMAL ANALYSIS DATA

Because thermal analysis techniques involve the measurement of some system parameter as a function of temperature [1], it is essential that all experimental details be given in the manuscript. The Reports of the Nomenclature Committee of the International Confederation for Thermal Analysis (ICTA) [2,3] and the recommendations of McAdie [4,5] should, in general, be adhered to as far as manuscript space permits. These recommendations are briefly summarized here, and for further information the original references should be consulted.

(1) Identification of all materials by a definitive name, an empirical formula, or equivalent compositional data.

(2) A statement of the sources of all materials, their chemical purities, and other pertinent data.

(3) The furnace heating rate over the temperature range of interest.

(4) Identification of the sample chamber atmosphere by pressure, composition and purity. The conditions of atmosphere control, static, dynamic or self-generated, should be specified.

(5) Identification of the abscissa in temperature units or time.

In reporting TG data, report also the:

(6) Type of thermobalance employed, including manufacturer's name and the instrument model number.

(7) Mass loss should be plotted as a downward type curve either in mass or percent mass units.

In reporting DTA data, report also the:

(8) Type of instrument employed, including the manufacturer's name and the instrument model number.

(9) Sample preparation and dilution and also the reference material employed.

(10) The ordinate scale should indicate the ΔT sensitivity at room temperature in °C. Preferred plotting for endothermic reactions consists of downward deflection of the curve peaks and exothermic reactions as upward deflections.

In reporting DSC data, report also the:

(11) Type of instrument employed, including the manufacturer's name and the instrument model number.

(12) The ordinate scale should be accurately described in power or ΔT units, depending upon the instrument employed. Preferred plotting for endothermic reactions is as upward deflection of the curve peaks and exothermic reactions as downward deflections.

Other thermal analysis techniques:

(13) Type of instrument employed, including the manufacturer's name and the instrument model number.

(14) The ordinate scale should be accurately described in the preferred units of measurement.

REFERENCES

1 W.W. Wendlandt, Thermal Methods of Analysis, Wiley-Interscience, New York, 3rd edn., 1976, Chap. 1.
2 R.C. Mackenzie, Talanta, 16 (1969) 1227.
3 R.C. Mackenzie, C.J. Keattch, D. Dollimore, J.A. Forrester, A.A. Hodgson and J.P. Redfern, Talanta, 19 (1972) 1079.
4 H.G. McAdie, Anal. Chem., 39 (1967) 543.
5 H.G. McAdie, Anal. Chem., 44 (1972) 640.