



Trade Science Inc.

# Analytical CHEMISTRY

An Indian Journal

Guidelines for publication  
(Revised January 2012)

## 1. SCOPE AND POLICY

The *Analytical Chemistry : An Indian Journal* is devoted to the rapid publication of original and significant research in the fundamental theory, practice and application of analytical and bioanalytical science including miniaturization of analytical systems, bioanalyses, chromatography, mass spectrometry, electrophoresis, electrochemistry, sampling and sample handling, atomic and molecular spectroscopy. All contributions shall be rigorously refereed and selected on the basis of quality and originality of the work as well as the breadth of interest to readers. The journal publishes the most significant new research in all phases of analytical chemistry being done in the world today, thus ensuring its scientific priority.

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Submitted to the *Analytical Chemistry : An Indian Journal* must be original and unpublished (including in conference proceeding in electronic conferences or on web sites) and must not be under simultaneous consideration by another journal.

Manuscripts will be published in the WWW edition after completing all formalities. Authors should consider this when planning intellectual and patent activities related to the research work. Web publication date is illustrated at the first page of the manuscript in the printed issue. Manuscript will be sent for review only when author will provide a signed Copyright Transfer Agreement (CTA).

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Manuscripts, original of illustrations and proofs will be destroyed 3 months after publication.

## 2. TYPES OF CONTRIBUTIONS

Manuscripts submitted to the *Analytical Chemistry : An Indian Journal* should be *Urgent Communication, Review, Note, Advancements in Instrumentation, Full Paper*.

**1. Urgent Communication:** *Urgent Communication* is a report of unusual urgency, significance and interest originating all areas of analytical chemistry. Urgent communication is presentation of research results which deserve rapid publication owing to priority or urged demands from scientific or social communities. A statement from authors describing why their communication meets these criteria is required. Urgent communication is restricted to 2000 words or three journal.s pages. This limit will be strictly followed.

**2. Review:** *Review* introduces the reader to a particular area of an author.s research through a concise overview of a selected topic. The content should balance scope with depth; it should be a focused review of 9-10 journal pages. A passport-type photo and a short summary of the career to-date of corresponding author should be included. Reference to important work from others that is significant to the topic should be included. Review will not have .Experimental. section.

**3. Note:** *Note* is a concise terminal report of studies of limited scope. Note is shorter in length than the average *Full Paper* and is limited to 4 journal pages. *Note* contains studies of new or improved synthesis of known compounds of special interest or established utility, synthesis and structural characterization of a single new compound.

**4. Advancements in Instrumentation:** Reports briefly on progress in instrumentation.

**5. Full Paper:** *Full Paper* must either be of a current general interest or of great significance to a more specialized readership. It is peer reviewed and report details of studies that have not been published previously, except in the form of primary communications. Manuscript should be derived into sections including .Experimental.. There is no restriction placed on the length of a *Full Paper*.

A modular version of these guidelines is available as separate PDF on the internet at <http://www.tsijournals.com/acaij>

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Author must fulfill formatting requirements mentioned in *.PREPARATION OF MANUSCRIPT AND SUPPLEMENTARY INFORMATION*. during submission, if missing, author will be given maximum 15 days to furnish the requested material, if failed manuscript will be inactivated. Same conditions will apply during revision process. An inactivated manuscript will be reactivated on author.s request will be assigned a new .Received Date. and they will have to provide another signed CTA.

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- a. The corresponding author.s name, postal and e-mail addresses, telephone and fax numbers.
- b. The title of the manuscript and a brief paragraph explaining significance of the work.
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- d. Statement and particular submitted manuscript must be original and unpublished (including in conference proceeding in electronic conferences or on web sites) and must not be under simultaneous consideration by another journal.
- e. The names, institutional affiliations, and postal and email addresses of 5 or more qualified reviewers. When authors cite unpublished information of other researchers who are not co-authors, copies of letters or email message of permission should be attached. A manuscript containing copyrighted information must be accompanied by copyright holder permission to reproduce it, no need when information is from TSI journal.

**C. Supplementary Information :** Supplementary Information files are uploaded at the same time as the manuscript. Instructions of preparation of Supplementary Information are discussed in *.PREPARATION OF MANUSCRIPT AND SUPPLEMENTARY INFORMATION..*

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In revising the manuscript, author should address any technical concerns raised by editor or reviewer, changes to the manuscript and the Supplementary Information according to editor.s or reviewer.s report should be mentioned in a new cover letter. During revision, author should check correct spelling, consistent notation and references.

If the revision request manuscript is not returned within 30 days to Editor, manuscript will be inactivated.

The revised manuscript must be uploaded as revised submission not as a new manuscript. New or replacement Supplementary Information files can be added during revision. If there are any changes to any previously uploaded files, the author should explain the changes in the cover letter.

#### Additions & Corrections

If, errors or omissions of any information are found in a published paper, the corresponding author should contact the Editor-in-Chief for instruction on submitting and addition or correction. Acceptance of an addition or correction is subject to approval by the Editor-in-Chief.

### 4. PREPARATION OF MANUSCRIPT AND SUPPLEMENTARY INFORMATION

#### Manuscript Organization

The sections of a manuscript are (i) Title, (ii) Authors and Addresses, (iii) Corresponding Author.s E-mail Address, (iv) Abstract, (v) Keywords, (vi) Introduction, (vii) Experimental, (viii) Results and Discussion (may be separate), (ix) Conclusions (optional), (x) Acknowledgment (optional), (xi) Supplementary Information available paragraph, (xii) References and Footnotes.

**i. Title:** The title should be accurately, clearly and grammatically correct and concisely reflect emphasis and content of the manuscript. The wording of the title is important for correct awareness alerting and for information retrieval. Words should be chosen carefully to provide information on the content and to function as indenting terms. Abbreviations should be avoided. It should be typed with a word all in bold face capitals, double spaced, center of the width of the first page.

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the author to whom correspondences should be addressed. The names and addresses of the institution(s) where the work was performed should be listed in the following paragraph. If this is different from the present address, this should be noted in footnote.

**iii. Corresponding Author's E-mail Address:** The email address of the corresponding author should be placed on a separate line below the institution addresses. If the corresponding author is no longer at the institution where the work was performed, the first footnote, marked with an asterisk(\*) should be that author's current address.

**iv. Abstract:** Abstract is used directly for abstraction in various abstraction services. This should state concisely the scope of the work and the principal findings no more than 200 words for *Full Papers*, *Microreviews* and 90 words for *Short Communications*.

**v. Keywords:** 5-6 keywords should be provided directly below the abstract.

**vi. Introduction:** The introduction should be placed in the work in the appropriate context and clearly state the purpose and objectives of the research. An extensive review of prior work is not appropriate and documentation of the relevant background literature should be selective rather than exhaustive particularly if reviews can be cited.

**vii. Experimental:** It is necessary to note types of instruments used for obtaining physicochemical characteristics of compounds; either the sources of the nontrivial reagents used should be specified or references for their synthesis should be given. Procedures used for the additional treatment of reagents and solvents should be described or references to corresponding publications should be provided in the Supplementary Information.

Sources of stationary phases for chromatography and supports for solid-phase synthesis may be identified. Sources of reactants, reagents, and solvents available from major laboratory chemical and biochemical supply firms should not be identified except in the case of starting compounds that are unused or not widely available or when the author has evidence that the use of material from a particular source is critical to the outcome of an experiment.

Commercial and institutional providers of analytical services should not be named. The experimental part, together with material provided in the Supplementary Information, should provide the reader with a clear and unambiguous description of the work reported. It should not be verbose, but should be sufficiently detailed that it is readily reproducible. Less critical experimental details may be included in the Supplementary Information. In reporting synthetic work, authors should include descriptions of new reactions and procedures, substantially modified or

improved literature. Procedures, and key steps in multistep sequences characterization data for previously reported compounds, reproductions of spectra, X-ray crystallographic data and graphics, and detailed data and graphics from theoretical computations should be included in the Supplementary Information. Experimental should include only one detailed representative example, analogous examples should be placed in the Supplementary Information.

The title of each experiment should include the chemical name of the compound and the assigned compound number in Arabic bold face, however once one is chosen it must be used throughout the manuscript. Each previously unreported compound must be supported by adequate spectral data and elemental analyses.

All elemental analytical data will be published. In molecular formulas, elements should be arranged according to the Chemical Abstracts System; C, H, and then all other elements in alphabetical order. Formulas of molecular adducts and onium salts are given with raised dots, e.g.  $C_5H_{10}N_2 \cdot 2HCl$ . The mass of a reagent introduced into a reaction is accompanied by its molar quantity e.g. 2-aminopyridine (0.094g, 1mmol).

Analytical constants and spectral characteristics should be tabulated. For separate compounds these data are presented in the Experimental according to the following format

- m.p. 14-15°C (from pentane)
- b.p. 122-123°C/10mm Hg
- UV (ethanol) :  $\lambda_{max}(\epsilon)$  : 250nm (631)
- IR (KBr)  $\nu_{cm^{-1}}$  : 1650 (C=N), 3200-3440 (O-H)
- $^1H$  NMR (TMS)  $\delta$ ppm: 8.02-7.51(m, 9H, phenyl)

If the standard in  $^1H$  and  $^{13}C$  NMR is not TMS, the chemical shift of the standard used (in  $\delta$  scale) should be noted. Protons in the complex groups, to which signal relates, should be underlined below. Chemical shifts in the NMR  $^1H$  and  $^{13}C$  with the frequency below 400MHz should be given with an accuracy to one tenths and hundredths. Mass spectra should be presented as numerical m/z values and relative ion currents either as plain text or as a table. The Ionization method used, ionization energy, mass numbers of characteristic ions, genesis of these ions and the intensity with respect to the major ion should be given.

When flash chromatography is used for product purification, both the support and solvent should be identified. Details such as size or type of glassware, and numbers and volumes of extraction and wash solvents, should not be included unless they are critical to the outcome of an experiment.

Experimental procedures describing the use of microwave irradiation must be accompanied by a description in the Supplementary Information that provides, the manufacturer and model of the microwave reactor, the

temperature of the reaction mixture and the method of measurement and the reaction time specified as total irradiation time or as ramp time and hold time at the final temperature.

**Abbreviations:** Standard physicochemical methods and related terms as well as common reagents are designated by generally accepted English abbreviations. All nontrivial terms and abbreviations must be explained when mentioned for the first time. The following common abbreviations should be used:  $\mu\text{g}$ -microgram; mg-milligram; g-gram; nm-nanometer;  $\mu\text{m}$ -micrometer; mm-millimeter; cm-centimeter; ml-milliliter;  $^{\circ}\text{C}$ -degree centigrade; K-kelvin scale; J-joule; kJ-kilojoule; A-ampere; mA-milliamper; V-Volt; mV-millivolt; Hz-hertz; MHz-megahertz; W-watt; mol-mole; mmol-millimole; mol/l-molar concentration; 1N-one-normal (solution); M-molecular mass; eq.-equivalent; m.p.-melting point; b.p.-boiling point; h-hour; min-minute; s-second. Abbreviations of words secondary and tertiary should be written before names as sec- and tert- while before formulas as s- and t-.

Abbreviations of prefixes ortho-, meta-, para- etc. should be written as o-, m-, p-. For solvents following abbreviations may be used AcOH-acetic acid; Ac<sub>2</sub>O-acetic anhydride; AcOEt/EtOAc-ethyl acetate; BuOH-butyl alcohol; s-BuOH-sec. butyl alcohol; t-BuOH-tert-butyl alcohol; DMF-N,N-dimethylformamide; DMSO-dimethyl sulfoxide; EtOH-ethyl alcohol; Et<sub>2</sub>O-diethyl ether; MeOH-methyl alcohol; Me<sub>2</sub>CO-acetone; MeCN-acetonitrile; PhOH-phenol; PhCl-chlorobenzene; PhMe-toluene; i-PrOH-isopropyl alcohol; THF-tetrahydrofuran etc.

For reagents, radicals, ligands, protecting groups: Acacetyl; acac-acetyl acetone; Ad-adamantyl; Alk-alkyl; All-allyl; Ar-aryl; Bn-benzyl (PhCH<sub>2</sub>); Bu-butyl (s-Bu, i-Bu, t-Bu respectively); Bz-benzoyl (PhCO); Cbm-carbamoyl; Cp-cyclopentadienyl; en-ethylenediamine (as ligand only); Et-ethyl; Hal-halogen; Het-heteryl; Me-methyl; Mes-Mesityl; Ph-phenyl; Pr-propyl; i-Pr-isopropyl; Py-pyridine; Pft-trifluoromethanesulfonyl; Ts-tosyl; Vin-vinyl as well as common designations for amino acids, carbohydrates and protecting groups.

Author should emphasize any unexpected or new hazards encountered and appropriate precautions in experimental reported work.

**Nomenclature:** Authors should use a systematic name following Chemical Abstracts or IUPAC conventions for each compound whose preparation is reported in the

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plex compounds with unduly lengthy or unwieldy names should be referred to by their functional class and structure number in the text.

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Footnotes within tables should be given lowercase italic letter designations and should be cited in the table with lowercase italic superscripted letters. The sequence of letters should proceed by row, and from left to right within any rows having more than one footnote. If a reference is cited both in the text and in a table, the lettered footnote in the table should cite the text reference's number. Above each table should be typed in boldface characters, a sequential Arabic table number and short descriptive title. Whether possible, structure number should be used in table rather than small structural graphics. A table that contains one or more structures or other graphics is considered a single graphic for journal production. The table number title and any footnotes should not be included in the graphic but should be typed in the manuscript text file.

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scanned halftone figures a resolution of 300 dpi is sufficient. Scanned figures compressed with JPEG usually give no problems.

**viii. Results & Discussion:** The presentation of experimental detail in the Results & Discussion section should be kept to minimum. Reiteration of information that is made obvious in tables, figures, or reaction schemes should be avoided. Authors are encouraged to make extensive use of the Supplementary Information, which is supplementary material that is submitted at the same time as the manuscript is made available on the journal's web site, and is electronically linked to the manuscript in the journal's web edition. The use of Supplementary Information is particularly appropriate for presenting additional discussion, graphs, spectra and tables that are more likely to be of the interest to specialist than to general readers. Refer to the Supplementary Information section for the guidelines of preparing this material for submission.

**ix. Conclusions:** If an optional conclusion section is used, its content should not substantially duplicate the abstract.

**x. Acknowledgement:** This section may be used to acknowledge helpful discussion with colleagues, technical assistance, gifts of starting material or reference samples, data from individual providers of spectroscopic, analytical or crystallographic services who are not co-authors, and financial support.

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## Journal

A.K.Bose, M.S.Manhas, M.Ghosh, M.Shah, V.S. Raju, S.S.Bari, S.N.Newaz, B.K.Banik, A.G.Chaudhary, K.J.Barakat; *J.Org.Chem.*, **56**, 6998 (1991).

## Book

T.Greene, W.Wuts; 'PGM Protecting Groups in Organic Synthesis', 2nd Ed., John-Wiley; New York, (1991).

## Chapter in book

E.G.Kauffmann; The Fabric of Cretaceous Marine Extinctions, pg.151-248, in W.A.Beggren, J.A.Van, Couvering Ed., 'Catastrophes and Earth History', Princeton University Press, Princeton (NJ) (1984).

## Inpress

A.Dandia, R.Singh, S.Khaturia, C.Merienne, G.Morgan; A.Loupy; *Bioorganic and Medicinal Chemistry* (in press).

## Dissertation

L.Clegg; The Morphology of Clonal Growth and its Relevance to the Population Dynamics of Perennial Plants, PhD dissertation, University of Wales, Bangor, United Kingdom.

## Master's Thesis

S.Bhan; Growth of Grass Shrimp in a Contaminated and Uncontaminated site, Master's Thesis, New Jersey Institute of Technology, Newark (1997).

## News Paper

N.Kowlofsky; Oil spill has massive effects on vegetation, *New York Times*, 29 March, pB2 (1998).

## Presented Papers

R.L.P.Kleiman, R.S.Hedin, H.M.Ednborn; Biological Treatment of Mine water- an overview, Paper presented at the Second International Conference on Abatement of Acid Drainage, Montreal, Canada, 16-18 Sept.(1991).

## Report

[USEPA] US Environmental Protection Agency; Characterization of Municipal waste in the United States, Washington (DC): Office of Solid waste and emergency response, Report no.EPA/ 530-R-92-019 (1992).

## Website

In parentheses, show the date, the site was last accessed the date you checked to make sure the site was still online and the URL, separated by a semicolon. Do not use ending punctuation.

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