



Trade Science Inc.

Research & Reviews in

BioSciences

Guidelines for publication

(Revised January 2012)

1. SCOPE AND POLICY

The *Research & Reviews In BioSciences* is devoted to the rapid publication of fundamental research papers on all phases of biological sciences.

Topics include:

- Agriculture (Agricultural Production, Agricultural Research, Animals and their management, Farming Types);
- BioChemistry (Bioenergetics, Cell Biology, Cell Membrane, DNA, Developmental, Biology, Enzymes, Extracellular, Matrixes, Genetics, Glycobiology, Lipids, Lipoproteins, Metabolisms, Proteins, Proteomics, RNA);
- Biophysics(Bioenergetics, Biomechanics, Cell Membrane, Cell Motility, Electrophysiology, Metabolism, Muscle, Nucleic Acids, Physical laws and principles, Proteins, Radiation Biophysics, Radiology, Sensory Physiology);
- Cell Biology(Cell Physiology, Cellular Structure, Cellular Types, Cytometry, Systems Biology);
- Developmental Biology(Aging, Cleavage, Developmental Genetics, Embryonic Development, Embryonic Polarization, Evolutionary Developmental Biology, Fertilization, Fetal Development, Gametogenesis, Gastrulation, Metamorphosis, Morphogenesis, Teratology);
- Ecology(Autecology, Chemical Ecology, Community Ecology, Ecophysiology, Evolutionary Ecology, Paleocology, Synecology);
- Endocrinology(Adrenal Hormone Signaling, Endocrinorelated Proteins, Gastrointestinal Hormones, Glucocorticoit Signaling, Gonadal Hormone Signaling, Growth Factor Signaling, Hypothalamic Hormones, Pancreatic Hormones, Parathyroid Hormone Signaling, Pheromone Signaling, Pineal Hormone Signaling, Pituitary Hormone Signaling, Thyroid Hormone Signaling);
- Entomology(Common Insects, Insect Behaviour, Insect Classification, Insect Control, Insect Diseases, Insect Diversity, Insect Ecology, Insect Evaluation, Insect Morphology, Insect Physiology, Insect Population);
- Evolution(Evolutionary Forces, Evolutionary Process, Evolutionary Systematics, Evolutionary Theory, Forms of Evaluation, Molecular Evaluation, Organismal Evaluation, Original of Life, Paleontology);
- Genetics(Monogenic and Multifactorial Disorders, Development and Malformation, Hereditary Cancer, Medical Genomics, Genemapping and functional studies, Genotype-Phenotype Correlations, Genetic variation and Geonodiversity, Statistical and Computational Genetics, Bioinformatics, Advances in diagnostics, Therapy and Prevention, Animal Models, Genetic Services, Community Genetics);
- Genomics(Comparative Genomics, Functional Genomics, Genomes, Genomic Databases, Genomic Medicine, Global Gene Expression);
- Immunology(Immune System, Immunity, Immunologic Diseases, Immunologic Subspecialties, Lymphatic System);
- Microbiology(Archaeans, Bacteriology, General Microbiology, Mycology, Paracetology, Protozoology, Slim molds);
- Neuroscience(Behavioural Neuroscience, Cognitive Neuroscience, Computational Neuroscience, Developmental Neuroscience, Nervous System Diseases, Neuroanatomy by region of study, Neurological Imagine, Neurotransmitters and Neurotransmitter agonists/antagonists);
- Oncology(Basic Cancer Research, Cancer Types, Causes and Prevention, Detection and diagnosis, Methodology, Policy and patient case issues, Treatment options);
- Pharmacology(Pharmacodynamics, Pharmacoeconomics, Pharmacogenetics, Pharmacokinetics, Pharmacotherapy, Toxicology, Types of Pharmacology);
- Physiology(Animalia Classification, Cell Physiology, Circulatory Physiology, Digestive Physiology, Musculoskeletal Physiology, Nervous System Physiology, Physiological Processes, Plant Physiology, Renal Physiology, Reproductive Physiology, Respiratory Physiology, Skin Physiology);
- Plant Biology(Nonvascular Plants, Paleobotany, Plant Biochemistry, Plant Biotechnology, Plant Cell Biology, Plant Pathology, Plant Physiology, Plant research by anatomical structure, Vascular Plant);
- Population Biology(Adaption, Evolutionary mechanisms, Population dynamics);
- Signal Transduction(Mechanism of Signal Transduction, Membrane Receptor Signaling, Signaling Cascades, Signaling Pathways, Signaling in Cellular Processes, Signaling in Selected Disciplines);
- Virology(Viral Enzymes, Viral Evolution, Viral Infection, Viral Replication, Viral Structure, Viral Transmis-

sion, Virus like particles);

All contributions shall be rigorously refereed and selecting 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 biological sciences being done in the world today, thus ensuring its scientific priority.

The *Research & Reviews In BioSciences* will not accept mailed hardcopy manuscripts. Manuscripts submitted by e-mail cannot be accepted.

Authors should take this into account that manuscripts submitted to the *Research & Reviews In BioSciences* 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(s) will provide a signed Copyright Transfer Agreement (CTA). The CTA form assigned with manuscript number, received date, authors names and manuscript title will be provided to corresponding author by Editorial Office. Signatures of author and all co-authors are necessary in CTA form. The signed CTA form should be faxed or sent by post to the Editorial Office. If manuscript is not accepted for publication or is withdrawn by the author, the transfer of the copyright to the TSI is automatically cancelled.

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

2. TYPES OF CONTRIBUTIONS

Manuscripts submitted to the *Research & Reviews In BioSciences* should be *Short Communication, Review and Regular Paper*.

1. Short Communication: *Short Communication* is a report of unusual urgency, significance and interest originating in all areas of biological sciences. A statement from author describing why communication meets these criteria is required. *Short Communication* is restricted to 2000 words or 3 journal pages. This limit will be strictly followed. The text should be broken into sections however, an introductory paragraph should provide a general context of the work explaining its significance and indicating why it should be of interest to professional biologists, biology teachers, advanced students and policy makers in other areas while the end paragraph should summarize the major conclusions that can be drawn pointing to possible future directions.

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-size 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 no have "Materials and Methods" section.

3. Regular Paper: *Regular Paper* must feature novel previously unpublished material or represent full accounts of findings published earlier in preliminary form. *Regular Paper* may include final original results obtained experimentally, descriptions of new experimental methods. There is no restriction placed on the length of a *Regular Paper*.

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

3. SUBMISSION OF CONTRIBUTIONS

The '*Research & Reviews in BioSciences*' accepts manuscripts only via **Indian S Press** (TSI's Secure Online Manuscript Submission System). So contributors are requested not to send their manuscripts in form of mailed hardcopy or e-mail attachment, are not accepted. Only in unusual circumstances and Editor-in Chief's approval, mailed hardcopy manuscript will be processed.

Corresponding author or designee must be able to provide manuscript as complete word-processor and PDF files including text, tables, graphics for online submission. Any help regarding online submission will provide at tsijournals@tsijournals.com.

Corresponding author or designee has to be registered for submitting manuscripts via **Indian S Press**. After registration corresponding author will be able to check status of submitted manuscript.

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 author has to provide following items during submission:

A. Manuscript : The author should submit complete manuscript including text, tables, graphics in both wordprocessor and PDF files.

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.

B. 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'.

Revising The Manuscript

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. During revision, author should check correct spelling, consistent notation and references. If the revision request manuscript is not returned within 15 days to Editor, manuscript will not be considered for publication.

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.

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) Materials & Methods, (viii) Results and Discussion (may be separate), (ix) Conclusions (optional), (x) Acknowledgment (optional), (xi) Supplementary Information available paragraph, (xii) Abbreviations & Footnotes, (xiii) References.

i. Title: The title should be accurately, clearly, 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.

ii. Authors and Addresses: Authors' names include all those who have made substantial contributions to the works even in the manuscript was actually written by only one person use first name, middle name and surnames. At least one author must be designated with an asterisk (*) as 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 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. Materials and Methods: It is necessary to note types of instruments used for obtaining physicochemical characteristics of compounds; either the sources of the non-trivial 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 computa-

tions should be included in the Supplementary Information. Experimental should include only one detailed representative example, analogous examples should be placed in the Supplementary Information.

In a separate paragraph, experimental biological material should be reported as authenticated if cultivated or from a natural habitat, and the herbarium deposit cite and voucher number should be recorded. All microorganisms used experimentally should bear a strain designation number and the culture collection in which they are deposited. The scientific name (genus, species, authority citation, and family) should be presented when first mentioned in the body of the manuscript. Thereafter the authority should be eliminated, and the generic name should be reduced (except in tables and figure legends) to the first capital letter of the name.

If the biological material has not been identified as to species, the manuscript will not be considered for publication unless a special protocol has been followed. Thus, a voucher specimen of the organism should be deposited with a recognized taxonomist for the particular group of organisms in question. The taxonomist should then assign to specimen an identifying number unique to the organism so that any additional collections of the same organism would bear this same number. The number will be retained until the organism is completely identified. The taxonomist should write a brief taxonomic description to be included in the manuscript, which should state how the organism relates morphologically to known species. Authors should be aware of the fact that large scale collection of marine organisms may have ecological effects. Manuscript author describing an investigation derived from large-scale collections should thus include a statement in their manuscript explaining why the collection had no significant adverse ecological effect or justifying such effect in terms of the benefit from the resulting work.

Author who purchase dried .herbal remedies. or other materials from companies must make provision for their proper deposit in a herbarium, for access by future workers. When a commercially available extract is obtained, the extraction procedure from the organism of origin must be specified. The identification of the extract should be supported by an HPLC trace of known secondary metabolite constituents of the organism, which should be included in the manuscript as 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 is must be used throughout the manuscript. Each previously unreported compound must be supported by adequate spectral data and elemental analyses.

Physical constants and spectral characteristics should be tabulated. For separate compounds these data are pre-

ented in the Experimental according to the following format

- m.p. 14-15°C (from pentane)
- b.p. 122-123°C/10mm Hg
- UV (ethanol) : λ max(ϵ) : 250 nm (631)
- IR(KBr) ν cm⁻¹ : 1650 (C=N), 3200-3440 (O-H)
- ¹H NMR (TMS) δ ppm: 8.02-7.51(m, 9H, phenyl)

If the standard in ¹H and ¹³C NMR is not TMS, the chemical shift of the standard used (in δ scale) should be noted. Protons in the complex groups, to which signal relates, should be underlined below. Chemical shifts in the NMR ¹H and ¹³C 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.

Crystallographic Data: Only data and graphics vital to the discussion and should be included in the 'Results and Discussion'. If the data are used solely for confirming compound identify or stereochemistry, a statement in the 'Results and Discussion' or 'Material and Methods' that the assignment is supported by an X-ray crystallographic structure determination is usually sufficient. Regardless of the level of detail of the discussion of the structure, a CIF containing complete details of data collection, crystal and unit-cell parameters, structure solution and refinement and tables of atomic coordinates and thermal parameters, bond lengths, bond angles, and torsion angles should be included in the Supplementary Information even if the data have been deposited with a crystallographic database. If more than one crystal structure is being reported, the CIF for each structure should be furnished as a separate file. CIF should not be combined with other types of Supplementary Information files. Before being submitted CIFs should be saved in text-only (plain ASCII) format and should be checked using the free check CIF data-validation web utility at <http://checkcif.iucr.org> any reported syntax errors should be corrected. A copy of the final datavalidation report should be retained if the reviewer or editor has a question about the data.

For structures refined anisotropically, a thermal ellipsoid plot should be furnished as a figure in the Supplementary Information: the probability level should be indicated if it is different from 50%. The numbering of the atoms should match that used in the CIF. A sphericalatom

or wire-frame plot should be substituted only when necessary for clarity. Padding diagrams, stereo views, and other graphics may also be included in the Supplementary Information when appropriate.

Powder Diffraction Data: The authors are encouraged to present X-ray powder diffraction data for new or previously uncharacterized materials. In cases of unindexed listing of the data, the d spacings of all observed lines should be listed in sequence, together with their relative intensities. When filtered radiation is used, every effort should be made to identify residual b lines. Where resolution into a_1 - a_2 doublets occurs, the identification of the d spacing for each line as da_1 , da_2 gives a measure of the quality of the diffraction pattern. Relevant information about the specimen used should be included.

Structural Data: Atomic coordinates for structures of macromolecules determined by X-ray, NMR, or other methods should be deposited with Protein Data Bank (PDB). It is the author's responsibility to obtain a file name for the macromolecule; the file name must be referenced in the manuscript. Crystal structures of nucleic acids should be deposited with the Nucleic Acid Database (NDB).

Biological Data: Biological test methods must be referenced or described in sufficient detail to permit the experiments to be repeated by others. Standard compounds and established drugs should be tested on the same system for comparison, statistical limits for the biological data are usually required. Doses and concentrations should be expressed in molar quantities when comparisons of potencies are made with compounds having substantial differences in molecular weights. For inactive agents, the highest concentration or dose level tested should be indicated. For optically active substances, the optical purity should be clearly documented, especially for the less active or inactive enantiomers or diastereomers.

Protein Sequence Data: These data should be deposited with Protein Identification Resource National Biomedical Research Foundation, Georgetown University Medical Center, Washington, D.C. 20007. Authors of accepted manuscripts containing nucleotide sequences should submit the sequence data, preferably in computer-readable form plus information for annotation of the data and a copy of the paper to GenBank Submissions, National Center for Biotechnology Information (NCBI), Building 38A, Room 8N-805, 8600 Rockville Pike, Bethesda, Maryland 20894. A foot note should appear on the title page indicating that such a deposit has been made.

Nomenclature: Authors should use a systematic name similar to those used by Chemical Abstract Service and IUPAC for each compound whose preparation is reported in the "Materials and Methods" or in the "Supplementary Information" IUPAC guide to macromolecular nomenclature are available at <http://www.iupac.org/publica->

<http://www.iupac.org/books/author/metanomski.html> and <http://www.iupac.org/reports/iv/guide.html>. For certain specialized classes of compounds such as steroids, peptides, carbohydrates, and cyclophanes, the names should conform to the nomenclature conventions generally accepted for that class. Complex compounds with unduly lengthy or unwieldy names should be referred to by their functional class and structure number in the text.

Tables: The use of tables is encouraged to present data in a space-efficient manner. Tables must be inserted in the manuscript word-processor file near their first mention in the text. They should be created with the word processor's table-formatting feature. Each data entry should be placed within its own table cell; tabs and line returns should not be used within cells. Arrangements that leave many columns only partially filled should be avoided.

Footnotes within tables should be given lowercase designations and should be cited in the table with lowercase 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.

Graphics: All graphics (illustrations) must be prepared in digital format and inserted into the manuscript word processor file near their first mention in the text. Graphics intended to appear in black and white or grayscale should not be submitted in colour. When areas in a graphic created with a graphics program need to be shaded or filled in parallel lines or crosshatching, rather than gray shading, should be used whenever possible to allow the graphic to be processed as line art rather than as grayscale art.

The editors encourage the use of colour in manuscript graphics when it is important for clarity of presentation. Although there is no charge for inclusion of colour illustration in the manuscript, paper reprints containing colour graphics has a supplemental charge of \$50 per 100 copies (1000 Rs. Per 100 copies). There are no restrictions on the use of colour in the Supplementary Information.

The quality of the graphics published in the journal depends on the quality of the graphic images provided by authors. Digital graphics should have minimum resolution.

Black and white line art 1200dpi

Grayscale art 600dpi

Colour art 300dpi

For uniformity of appearance, all the graphics of the same type should share a common graphic style and font. Structures, schemes and other drawings are made with standard drawing programme - most preferable advanced version of ChemDraw. Drawings made with CorelDraw 5/11. For scanned halftone figures a resolution of 300 dpi insufficient. Scanned figures compressed with JPEG usually give no problems.

Equations: Equations must be written using Microsoft Equation Editor when mentioning an equation in text, refer to it as equation 1, not equation (3) or simply (3). When "Equation" is spelled out in text, it is lower cased and there are no parenthesis around the equation number. Displayed equations are indented. Not all displayed equations need be numbered; number only if the displayed equation is referred to letter in the text. If numbered, the number is put in parenthesis, flush right.

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 coauthors, and financial support.

xi. Supplementary Information available statement: If the manuscript is accompanied by any Supplementary Information, a brief description of the Supplementary Information material must be included in the manuscript. This material is available free of charge via Editorial Office on request.

xii. 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:

µg-microgram; mg-milligram; g-gram; nm-nanometer; µm-micrometer; mm-millimeter; cm-centimeter; ml-milliliter; °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; Ac₂O-acetic anhydride; AcOEt/EtOAc-ethyl acetate; BuOH-butyl alcohol; s-BuOHsec-butyl alcohol; t-BuOH-tert-butyl alcohol; DMF-N,N-dimethyl formamide; DMSO-dimethyl sulfoxide; EtOH-ethyl alcohol; Et₂O-diethyl ether; MeOH-methyl alcohol; Me₂CO-acetone; MeCN-acetonitrile; PhOH-phenol; PhCl-chlorobenzene; PhMe-toluene; i-PrOH-isopropyl alcohol; THF-tetrahydrofuran etc.

For reagents, radicals, ligands, protecting groups: Ac-acetyl; Acac-acetyl acetone; Ad-adamantyl; Alk-alkyl; All-allyl; Ar-aryl; Bn-benzyl (PhCH₂); 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-hetaryl; Me-methyl; Mes-Mesityl; Ph-phenyl; Pr-propyl; i-Pr-isopropyl; Py-pyridine; Pf-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.

xiii. References and Footnotes: Authors should be judicious in citing the literature; unnecessarily long list of references should be avoided. Any articles, communications, letters, patents, theses, and conference abstracts in which portions of the reported work have been previously disclosed must be cited long footnotes should be avoided; additional data and peripheral discussion should be placed in the Supplementary Information rather than in footnotes.

All the references and footnotes must be placed together in a list at the end of the manuscript text. They should be numbered with Arabic numerals in the order of the first citation in the text, and the corresponding numbers inserted at the appropriate locations in the text as superscripted numerals with bold square brackets. It is crucial that authors verify their accuracy.

Journal

R.Pool; Research News, 245, 1187-1189 (1989).

Book

Edition J.C.Bartonek, D.N.Nettleship; 'Conservation of Marine Birds of Northern North America', Academic Press, New York, (1977). *Volume* R.D.Semlitsch, T.J.Ryan; *Migration, amphibian*, pages 221-227 in E.Knobel, J.D.Neill eds., 'The Encyclopedia of Reproduction', Vol.3, Academic Press, New York, (1998).

Chapter

E.G.Kauffmann; *The Fabric of Cretaceous Marine Extinctions*, pages 151-248, in W.A.Beggren, J.A.Van, Couvering Eds. '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.

Supplementary Information Material that is not needed for reading the papers but which should be available to document experiments or calculations for future researchers should be put into 'Supplementary Information'.

This material may include tables, illustrations, derivations, experimental procedures, analytical and spectral char-

acterization data, spectra, modeling coordinates and programs and CIFs. The 'Supplementary Information' may also include additional material or discussion that is primarily of interest to specialized readers. Authors are encouraged to make use of Supplementary Information in the interest of shorter manuscripts, not only to save space but also to create more focused presentations.

Material deposited as Supplementary Information will be made available free of charge from Editorial Office on request.

The technical content of the Supplementary Information is discussed in "Results and Discussion", "Materials and Methods" sections. This section describes the mechanics of preparing the Supplementary Information for submission.

A wide range of electronic formats is supported. All text and graphics (including spectra) should be combined into a single PDF file. If submission as a single file is not possible then all files of the same file type should be combined. The size of any single file is limited to 5 MB. Crystallographic information files (CIFs) in ASCII format should be uploaded separately from other types of files.

Text in the Supplementary Information should meet the same formatting and typographic requirements as the manuscript text graphics must meet the same quality standards as the graphic in the manuscript. Spectra should be in sharp focus, have dark unbroken lines, and be labeled with a structure number and a small graphic of the structure, axis labels and scales, peak frequencies or chemical shifts and all other text and numerical information must be clearly legible. Captions for figures other than spectra should be appeared directly below the figures.

All the pages of Supplementary Information files containing text and graphics must be consecutively numbered SI1, SI2. The first page (SI1) must be a title page containing the title of the manuscript the names of the authors and a detailed Table of Contents with the page numbers of individual spectra, tables and other data. The requirements for providing a title page with table of contents and for numbering the pages do not apply to crystallographic data submitted as CIFs.

A Supplementary Information available statement identifying the type of supplementary material being furnished must be inserted in the text of the manuscript immediately before the References and Footnotes.

5. COPYRIGHT TRANSFER AGREEMENT

A properly completed and signed Copyright Transfer Agreement must be provided for each submitted manuscript. The CTA form with the assigned manuscript number will be provided to corresponding author by Editorial Office. The signed CTA form should be faxed or sent by post to the Editorial Office. Manuscript will be sent for review after receiving signed CTA form. If a

manuscript is not accepted for publication or is withdrawn by the author the transfer of CTA to the TSI is automatically cancelled. Supplementary Information will be considered as a part of publication and will covered by copyright.

6. PROOFS

Proofs will be sent electronically. Only typographic corrections and other minor changes may be made in a galley proof. Any substantive changes will require editorial approval and may delay publication.

7. REPRINTS

Access of 100 e-reprints are free to the corresponding author. Printed reprints may be ordered.

8. PUBLICATION CHARGES

Publication of manuscripts are totally free.



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Research & Reviews in

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Guidelines for publication

(Revised January 2012)

1. SCOPE AND POLICY

The *Research & Reviews In BioSciences* is devoted to the rapid publication of fundamental research papers on all phases of biological sciences.

Topics include:

- Agriculture (Agricultural Production, Agricultural Research, Animals and their management, Farming Types);
- BioChemistry (Bioenergetics, Cell Biology, Cell Membrane, DNA, Developmental, Biology, Enzymes, Extracellular, Matrixes, Genetics, Glycobiology, Lipids, Lipoproteins, Metabolisms, Proteins, Proteomics, RNA);
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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) Materials & Methods, (viii) Results and Discussion (may be separate), (ix) Conclusions (optional), (x) Acknowledgment (optional), (xi) Supplementary Information available paragraph, (xii) Abbreviations & Footnotes, (xiii) References.

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Physical constants and spectral characteristics should be tabulated. For separate compounds these data are pre-

ented in the Experimental according to the following format

- m.p. 14-15°C (from pentane)
- b.p. 122-123°C/10mm Hg
- UV (ethanol) : λ max(ϵ) : 250 nm (631)
- IR(KBr) ν cm⁻¹ : 1650 (C=N), 3200-3440 (O-H)
- ¹H NMR (TMS) δ ppm: 8.02-7.51(m, 9H, phenyl)

If the standard in ¹H and ¹³C NMR is not TMS, the chemical shift of the standard used (in δ scale) should be noted. Protons in the complex groups, to which signal relates, should be underlined below. Chemical shifts in the NMR ¹H and ¹³C 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.

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AcOH-acetic acid; Ac₂O-acetic anhydride; AcOEt/EtOAc-ethyl acetate; BuOH-butyl alcohol; s-BuOHsec-butyl alcohol; t-BuOH-tert-butyl alcohol; DMF-N,N-dimethyl formamide; DMSO-dimethyl sulfoxide; EtOH-ethyl alcohol; Et₂O-diethyl ether; MeOH-methyl alcohol; Me₂CO-acetone; MeCN-acetonitrile; PhOH-phenol; PhCl-chlorobenzene; PhMe-toluene; i-PrOH-isopropyl alcohol; THF-tetrahydrofuran etc.

For reagents, radicals, ligands, protecting groups: Ac-acetyl; Acac-acetyl acetone; Ad-adamantyl; Alk-alkyl; All-allyl; Ar-aryl; Bn-benzyl (PhCH₂); 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-hetaryl; Me-methyl; Mes-Mesityl; Ph-phenyl; Pr-propyl; i-Pr-isopropyl; Py-pyridine; Pf-trifluoromethanesulfonyl; Ts-tosyl; Vin-vinyl as well as common designations for amino acids, carbohydrates and protecting groups.

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Journal

R.Pool; Research News, 245, 1187-1189 (1989).

Book

Edition J.C.Bartonek, D.N.Nettleship; 'Conservation of Marine Birds of Northern North America', Academic Press, New York, (1977). *Volume* R.D.Semlitsch, T.J.Ryan; *Migration, amphibian*, pages 221-227 in E.Knobel, J.D.Neill eds., 'The Encyclopedia of Reproduction', Vol.3, Academic Press, New York, (1998).

Chapter

E.G.Kauffmann; *The Fabric of Cretaceous Marine Extinctions*, pages 151-248, in W.A.Beggren, J.A.Van, Couvering Eds. '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

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