

INSTRUCTIONS TO AUTHORS

Due to alterations in the editorial policy of Journal PHARMACIA, the following changes will be applied:

*Since January 2013 the Journal will be published only in English, in printed and in electronic version. The printed copies will be submitted to libraries and other public scientific organizations. In order to provide for this, a publication fee will be imposed, since PHARMACIA does not have any income source like subscription charges or as annual membership charges of author (s). Therefore the authors will be requested to make a payment of 100 BGN or 50€ as **Article Processing Fee (bank charges extra)** upon acceptance of the manuscript for publication.*

The table of contents and the abstract of the published manuscripts will be available online in open access format.

The authors receive free of charge pdf file of the full text of the article.

AIMS AND SCOPE

The journal PHARMACIA publishes original research papers, preliminary communications, short communications (notes) and review articles, in the pharmaceutical and related sciences.

The Journal also publishes announcements, reports of conferences, biographies (anniversaries, awards, etc.) as well as book reviews.

PHARMACIA is a multidisciplinary journal devoted to pharmaceutical and allied sciences. Topics covered are: analytics, biochemistry, biopharmaceutics, biotechnology, cell cultures, clinical pharmacy, drug delivery, drug design, drug disposition, drug stability, medicinal chemistry, metabolism, molecular modeling, basic and clinical pharmacology, pharmacognosy, pharmacoepidemiology, pharmacoconomics, pharmacodynamics and pharmacokinetics, social pharmacy, radiopharmaceuticals, toxicology.

EDITORIAL POLICY

Original research papers should contain unpublished results of original research, which must be presented in sufficient detail to ensure the reproducibility of the described experiments.

Preliminary communications are brief scientific contributions whose character requires rapid publication without supplying the details necessary to reproduce the described experiments.

Short communications (notes) provide reports on short, but completed, research or descriptions of original laboratory techniques (methods, apparatus).

Review articles are concise and critical surveys of novel accomplishments in the author's research field. They may also contain original theoretical considerations. The results and role of the author's research must be clearly distinguished from the results of the investigators referenced.

Only papers supplying previously unpublished scientific information will be entered in the first three of the above categories. Authors should specify to which of the four categories the submitted material should be allocated. Authors of review articles are advised to consult the Editorial Board prior to submitting the article.

The manuscript should be submitted in grammatically and stylistically correct English (American or British usage is accepted, but not a mixture of these) and written in the most concise form, which still ensures clarity of presentation.

The form and illustrations of the manuscripts should comply with the papers recently published in the **Journal**.

Manuscripts submitted to **Journal** are only accepted on the understanding that they are subject to editorial review and review of at least two independent referees, that they have not been and will not be published whole or in a part in any other journal, and that recommendations to comply with ethical standards when performing clinical and other biological experiments have been adhered to.

In case of contradicting reviews of 2 referees, the manuscript is sent to a third peer review and/or subjected to editorial evaluation. Each article accepted for publication is language edited.

Publishing frequency is four times a year (volume).

CONTENT AND STRUCTURE OF THE MANUSCRIPTS

All of the manuscripts should be presented in the native format of the word processor used. The text should be in single-column format with double spacing, using Times New Roman font, point 12 size and 3 – 4 cm margins. Author(s) should not break or hyphenate words.

The preferred text-processors are: Microsoft Word and Word Perfect. Please do **not** send ASCII files as relevant data may be lost. Include also the files containing computer generated graphics, artwork, bitmaps, and/or scanned images in one of the following formats: CDR, HPGL, WMF, EPS, TIF, PCX and JPG. For large image files, use one of the file compressing programs (ZIP, ARJ, RAR).

The manuscripts should not exceed the following limits:

Original papers – the core text (without the abstract, bibliography, figures and tables) should fit 6-8 pages.

Review articles (without the abstract, bibliography, figures and tables) should not exceed 12 pages.

Preliminary communications – the core text (including the abstract, bibliography, figures and tables) should fit 1-2 pages.

Short communications (notes) – Short communications are published as rapidly as possible. The length of a manuscript is limited to 3 pages (including short summary; subdivisions are not required; the "Experimental" - if there is one - should be marked), up to 15 citations of literature and a maximum of 2 supplementary materials (schemes, figures, tables) are allowed.

MANUSCRIPT DESIGN

The titles of the submitted papers should be short and informative; double titles should be avoided. The title of the article (but not other parts of the manuscript) must be typed in ALL CAPS fashion. The names of the authors should be written immediately below the title in the following order: first name (initial only) and surname. The author's affiliations should be summarized below the names, using superscript numbers.

Every article should contain the following sections: **Summary (Abstract), Introduction, Materials and Methods (Experimental Part), Results, Discussion (or Results and Discussion), Conclusion, References.** Please note that the sections should **not** be enumerated.

The abstract of less than 150 words should contain solely the essential results and conclusions of the presented work. Textual formulations from the title should not be repeated and the findings rather than the aim of the work should be described. The abstract should be written in the third person.

Graphical abstract and **Highlights** are mandatory for this journal. The graphical abstract should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership online. Authors must provide images that clearly represent the work described in the article. Graphical abstracts should be submitted as a separate file. Image size: please provide an image with a minimum of 531×1328 pixels (h \times w) or proportionally more. The image should be readable at a size of 5×13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. Highlights consist of a short collection of bullet points that convey the core findings of the article and should be submitted in a separate file. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point).

The abstract should be accompanied by 3 to 5 **keywords**, given below the abstract to describe the content of the paper avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

Introduction. This should indicate the question under investigation, which is generally based on a brief interpretation of the literature considering the current state of knowledge in the subfield and explaining the necessary theoretical foundations.

Materials and Methods (Experimental Part). Explanation of the study design (randomization, group formation / stratification, crossover studies) and experimental conditions; chemicals used; apparatuses and devices indicating the names and domiciles of the manufacturers/suppliers; detailed information about the experimental animals or cell lines along with keeping resp. culture conditions; information about the experiment and methods used (with literature references); detailed description of new methods; explanation of mathematical symbols and formulas; description of the statistical method used (referring to unpublished programs or computer models is not sufficient).

In the case of well known inorganic or organic compounds chemical formulae or common abbreviations may be used (e.g. NaCl, H₂SO₄, CH₃OH, C₆H₆: Ac, Eth, Me, Phe, DMSO) under "Experimental Part". In other parts of the paper this is not desirable.

For all newly synthesized compounds adequate evidence to establish identity and degree of purity must be provided. In general, this evidence should include elemental analyses for carbon, hydrogen and nitrogen (and/or halogen), if present. Supplying high-resolution mass spectral (HRMS) data in lieu of elemental analyses should be avoided whenever possible. HRMS data must always be accompanied with a proof of the degree of purity of the sample.

The following is the recommended style for analytical and spectral data presentation:

Specific Rotation:

$[\alpha]_{\text{D}}^{23} -222$ (c 0.35, MeOH).

Abbreviations: α = specific rotation; D = the sodium D line or wavelength of light used for determination; the superscript number, temperature ($^{\circ}\text{C}$) at which the determination was made; In parentheses: c stands for concentration; the number following c is the concentration in grams per 100 mL; followed by the solvent name or formula.

NMR Spectroscopy:

^1H NMR (500 MHz, $\text{DMSO-}d_6$) δ 0.85 (s, 3H, CH_3), 1.28–1.65 (m, 8H, $4\times\text{CH}_2$), 4.36–4.55 (m, 2H, H-1 and H-2), 7.41 (d, J 8.2 Hz, 1H, ArH), 7.76 (dd, J 6.0, 8.2 Hz, 1H, H-1'), 8.09 (br s, 1H, NH).

^{13}C NMR (125 MHz, CDCl_3) δ 12.0, 14.4, 23.7, 26.0, 30.2, 32.5, 40.6 (C-3), 47.4 (C-2'), 79.9, 82.1, 120.0 (C-7), 123.7 (C-5), 126.2 (C-4).

Abbreviations: δ = chemical shift in parts per million (ppm) downfield from the standard; J = coupling constant in hertz; multiplicities s = singlet; d = doublet; t = triplet; q = quartet; and br = broadened. Detailed peak assignments should not be made unless these are supported by definitive experiments such as isotopic labelling, DEPT, or two-dimensional NMR experiments.

IR Spectroscopy:

IR (KBr) ν 3236, 2957, 2924, 1666, 1528, 1348, 1097, 743 cm^{-1} .

Abbreviation: ν = wavenumber of maximum absorption peaks in reciprocal centimetres.

Mass Spectroscopy:

MS m/z (relative intensity): 305 (M+H, 100), 128 (25).

HRMS–FAB (m/z): $[\text{M}+\text{H}]^+$ calcd for $\text{C}_{21}\text{H}_{38}\text{N}_4\text{O}_6$, 442.2791; found, 442.2782.

Abbreviations: m/z = mass-to-charge ratio; M = molecular weight of the molecule itself; M^+ = molecular ion; HRMS = high-resolution mass spectrometry; FAB = fast atom bombardment.

UV–Visible Spectroscopy:

UV (CH_3OH) λ_{max} ($\log \epsilon$) 220 (3.10), 425 nm (3.26).

Abbreviations: λ_{max} = wavelength of maximum absorption in nanometres; ϵ = extinction coefficient.

Quantitative analysis:

Anal. Calcd for $\text{C}_{17}\text{H}_{24}\text{N}_2\text{O}_3$: C 67.08, H 7.95, N 9.20. Found: C 66.82, H 7.83, N 9.16.

All values are given in percentages.

Melting and boiling points:

mp 163–165 $^{\circ}\text{C}$ (lit. 166 $^{\circ}\text{C}$)

mp 180 $^{\circ}\text{C}$ dec.

bp 98 $^{\circ}\text{C}$

These specific abbreviations, listed above, should be used consequently as well as those described in “**Abbreviations**” part.

Studies in humans or animals must comply with the pertinent internationally valid legal provisions/guidelines. Refer to the obtaining of the approval of an ethics committee

(humans/animals). Clinical studies must meet the requirements specified in the Declaration of Helsinki (Somerset West) ("informed consent").

Results, Discussion (or Results and Discussion).

Results must be presented precisely using tables and/or figures, if applicable. Avoid duplicate presentation of results in figures and tables.

In this part, no results must be repeated, but the importance of the study should be emphasized and conclusions drawn. The findings may be compared with results from other studies (referring to the respective literature).

Conclusion. A short conclusion must be included after **Results and Discussion** section

Acknowledgments: An acknowledgment section (including financial support) may be included. It should be placed after the manuscript text and before the references.

References. The references should be written on a separate sheet. All references should be numbered sequentially [in square brackets] in the text and listed in the same numerical order in the reference section. References such as "personal communication", "unpublished results" and "in press" without stating the journal name are not allowed. The references should be cited as follows:

ARTICLE IN JOURNALS

All author names should be mentioned instead of *et al.*

Standard journal article

Lüthy IA, Bruzzone A, Piñero CP, Castillo LF, Chiesa IJ, Vazquez SM, Sarappa MG. Adrenoceptors: non conventional target for breast cancer? *Curr Med Chem* 2009; 16(15): 1850-1862.

Article in non-scientific journal

Manning R, Super organics. *Wired* 2004 May; pp. 176-181.

Organization as author

IARC Working Group. Phenoxy acid herbicides and contaminants: description of the IARC international register of workers. *Am J Ind Med* 1990; 18(2): 39-45.

IFCC Working Group on Enzymes, Scientific division. International federation of clinical chemistry: IFCC methods for measurement of catalytic concentration of enzymes. *Clin Chim Acta* 1999; 281(1-2): S5-S39.

No author given

Anonymous is also used in place of author names

Anonymous. Calculating immunity. *Sci Am* 1999; 281(3): 19.

Volume with supplement

Atkinson R. Gas-phase tropospheric chemistry of organic compounds: a review. *Atmos Environ* 2007; 41(Suppl. 1): 200-240.

Issue with supplement

Philip JR. The theory of infiltration: 1. The infiltration equation and its solution. *Soil Sci* 2006; 171(6 Suppl. 1): S34–S46.

Issue in sequence

Berthod A, Ruiz-Angel MJ, Carda-Broch S. Ionic liquids in separation techniques. *J Chromatogr A* 2008; 1184(1-2): 6-18.

Issue with part

Hon MEJ, Black AC. Admiralty jurisdiction and the protection of seafarers. *Aust N Z Maritime Law J* 2000; 15(pt. 1): 1-27.

Issue with no volume

Wills MR, Savory J. Aluminium poisoning: dialysis encephalopathy, osteomalacia, and anaemia. *Lancet* 1983; (2): 29.

No issue or volume

Liou KF, Cheng CH. Phosphine-mediated [2 + 2] cycloaddition of internal alk-2-ynoate and alk-2-ynone to [60]fullerene. *J Chem Soc Chem Commun* 1995: 2473.

Journal published in a language other than English

Takemi T. Confusion in medical practice. *J Jpn Med Assoc [Nippon Ishikai Zasshi]* 1966; 56(9): 1057-1061.

Article with published erratum

Malinowski JM, Bolesta S. Rosiglitazone in the treatment of type 2 diabetes mellitus: a critical review. *Clin Ther* 2000; 22(10): 1151-1168; discussion 1149-1150. Erratum in: *Clin Ther* 2001; 23(2): 309.

BOOKS AND OTHER MONOGRAPHS

Single author

Hoppert M. *Microscopic Techniques in Biotechnology*. Wiley-VCH: Weinheim 2003; pp. 145-158.

Schmidt LD. *The Engineering of Chemical Reactions*, 2nd ed. Oxford University Press: New York 2005; pp. 71- 88.

Single editor

Stocker JH, Ed. *Chemistry and Science Fiction*. American Chemical Society: Washington DC: 1998.

Two or more authors

Lawhead JB, Baker MC. *Introduction to Veterinary Science*. Thomson Delmar Learning: Clifton Park: NY 2005; pp.206-210.

Metzler DE, Metzler CM. *Biochemistry: The Chemical Reactions of Living Cells*. 2nd ed. Harcourt/Academic Press: San Diego, CA 2003.

Book with volume

Carey FA, Sundberg RJ. Advanced Organic Chemistry. 5th ed. Springer: New York 2007, Vol. 2: pp. 12-15.

Organization as author and publisher

American Chemical Society, Committee on Analytical Reagents. Reagent Chemicals: Specifications and Procedures. 10th ed.; Washington, DC 2006.

Chapter in a book

Almlöf J, Gropen O. Relativistic Effects in Chemistry. In: Reviews in Computational Chemistry. Lipkowitz KB, Boyd DB. Eds.; VCH: New York 1996; Vol. 8: pp. 206-210.

Ford HL, Sclafani RA, Degregori J. Cell Cycle Regulatory Cascades. In: Cell Cycle and Growth Control: Biomolecular Regulation and Cancer. 2nd ed. Stein GS, Pardee AB. Eds. Wiley-Liss: Hoboken, NJ 2004: pp. 42-67.

CONFERENCE PROCEEDINGS

El Nadi L. Ed. Modern Trends in Physics Research: First International Conference on Modern Trends in Physics Research. MTPR-04. Cairo, Egypt, 4-9 April 2004; AIP Conference Proceedings 0748; American Institute of Physics: Melville, NY 2005.

Christensen S, Oppacher F. An Analysis of Koza's Computational Effort Statistic for Genetic Programming. In: Genetic Programming, EuroGP 2002: Proceedings of the 5th European Conference on Genetic Programming 2002 April 3-5; Kinsdale, Ireland; Foster JA, Lutton E, Miller J, Ryan C, Tettamanzi AG. Eds. Springer: Berlin 2002: pp. 182-191.

SCIENTIFIC OR TECHNICAL REPORT

Hadfield JC. Groundwater Chemistry of the Piako Catchment. Hauraki Plains. Environment Waikato Technical Report 1993/7: Environment Waikato Regional Council: Hamilton, N.Z. 1993.

THESIS OR DISSERTATION

Mackel H. Capturing the Spectra of Silicon Solar Cells. PhD Thesis, The Australian National University: Canberra, December 2004.

PATENT

Gramm NT. A device to simplify the conversion of bibliographic information into citation format. U.S. Patent 7,005,423, September 13, 2005.

OTHER PUBLISHED MATERIALS

Dictionary

McGraw-Hill Dictionary of Chemistry. 2nd ed. McGraw-Hill: New York 2003: p. 26.

Audiovisual material

CD-ROM

Fleming SA, Jensen AW. Substituent effects on the photocleavage of benzyl-sulfur bonds. observation of the "META" effect. J Org Chem. [CD-ROM] 1996; 61: 7044.

DVD

Davis J. Producer, Scriptwriter. Chemistry of Carbon [DVD]. Classroom Video: Warriewood, NSW. 2005.

Television programme

Lazaredes N. Reporter. Frankenstein's Farm [Television Broadcast]. Special Broadcasting Service (SBS), Dateline 25th July, 2001.

Newspaper article

Lewis C. Under Pressure Blow Off Steam. The Age, 07th April 2008: p. 12.

Government publication

Australia. Commonwealth Department of the Environment and Heritage. Personal Monitoring of Selected Volatile Organic Compounds (VOCs): The Contribution of Woodsmoke to Exposure. Technical report no. 8, Canberra, ACT 2004: pp. 6-12.

Australian Bureau of Statistics. Environment Protection Mining and Manufacturing Industries, Australia, 2000-2001. ABS Publication 4603.0; Canberra 2002.

UNPUBLISHED MATERIAL

Personal communication

Saul, B.J. Personal Communication. Chemistry Department, Yale University, New Haven CT, July 2002.

ELECTRONIC MATERIAL

Journal article in electronic journal

Calafat AM, Needham LL. Factors affecting the evaluation of biomonitoring data for human exposure assessment. Int J Androl [Online] 2008; 31(2): 139-143. Blackwell Synergy <http://www.blackwell-synergy.com/> [Accessed on: 24th April 2008].

Bogdanchikova N, Simakov A, Smolentseva E, Pestryakov A, Farias MH, Diaz JA, Tempos A, Avalos M. Stabilization of catalytically active gold species in fe-modified zeolites. Appl Surf Sci [Online] 2008; 254(13): 4075-4083. ScienceDirect. <http://www.sciencedirect.com/> [Accessed on: 24th April 2008].

Marucho M, Kelley CT, Montgomery Pettitt B. Solutions of the optimized closure integral equation theory: heteronuclear polyatomic fluids. J Chem Theory Comput [Online] 2008; 4(3): 385-396. <http://0-pubs.acs.org/prospero.murdoch.edu.au/journals/jctcce/index.html> [Accessed on: 24th April 2008].

Chavez JGD, Ortega SH, Martinez-Garcia M. Synthesis of pyrene-anthracene conjugated molecular rods. Open Org Chem J 2009; 2: 11-21. Available from: <http://www.bentham.org/open/toocj/openaccess2.htm> [Accessed on: 26th Jan 2009].

Newspaper article from online database

Nicolaou KC, Montagnon T. The Art and Science of Making Molecules. Straits Times [Online] 8th March 2008. Factiva. <http://global.factiva.com> [Accessed 24th April 2008].

Austen I. Bottle Maker to Stop Using Plastic Linked to Health Concerns. New York Times [Online] 18th April 2008. http://www.nytimes.com/2008/04/18/business/18plastic.html?_r=1&scp=10&sq=chemistry&st=nyt&oref=slogin [Accessed 24th April 2008].

Homepage/website

International Society for Infectious Diseases. Saxitoxin poisoning, puffer fish - USA (02). <http://library.kcc.hawaii.edu/praise/news/puffer2.html> [Accessed on March 2004].

ACS Publications Division Home Page. <http://pubs.acs.org/> [Accessed March 2004].

Computer program

SciFinder Scholar, Version 2007, RN 58-08-2: Chemical Abstracts Service: Columbus, OH, 2007; [Accessed on: 23rd August 2007].

Correspondence. Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. **Ensure that telephone and fax numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address. Contact details must be kept up to date by the corresponding author.**

The illustrations (incl. diagrams) should be of high quality drawings/plots, or photos with dimensions up to 10×16 cm, suitable for direct reproduction. Legends should contain minimal explanatory text. Every illustration should be presented on a separate sheet with the corresponding figure caption while spaces for illustrations are to be marked in the text. The name of the first author and the title of the paper must be written on the back side of every sheet with illustrations. Microscopic (e. g. histological) pictures should be provided along with the scale of magnification and the marking “top/bottom”. Color photographs will not be reproduced in the printed version. All illustrations, except for formulas, should be referred to as figures (*e.g.* Fig. 1).

Tables could be incorporated in the text, using grid format with horizontal and vertical gridlines or alternatively they could be presented on separate sheets like the illustrations. A short informative title (bold) should accompany the table.

Tables and diagrams should be designed in a fashion that enables their understanding without referring to the text. Presentation of the same results in figures and tables will not be accepted.

Structural drawings. Structural drawings should be produced using a drawing program such as ChemWindow, ACD/ChemSketch, MDL ISIS Draw, or similar and should be pasted directly into the article.

Pharmaceutical substances. For the identification of pharmaceutical substances, the International Nonproprietary Names (INN) should be used. Registered Trade Marks (usually indicated with ®; in an article this sign should only be used when it is first mentioned or used in the summary), trivial names and chemical nomenclature can be added.

Nomenclature. Nomenclature and spelling should conform to the directions given by IUPAC. For nomenclature of peptides, see *Neuropeptides*, Vol. 1, 1981, p. 231.

The nomenclature of receptors and their subtypes should conform to the *TIPS 1995 Receptor & Ion Channel Nomenclature Supplement (Trends Pharmacol. Sci. Receptor Nomenclature Supplement 1995)*.

The trivial name of the enzyme may be used in the text, but the systematic name and classification number according to *Enzyme Nomenclature*, rev. edn. (Academic Press, New York, NY, 1984) should be quoted the first time the enzyme is mentioned.

Units of measurement. Units of measurement are determined by the directions of the International Units System SI as symbols; M instead of mol/l or mol * l⁻¹ is allowed.

Botanical names. Botanical names (species, genus) should be marked in italics.

Abbreviations. The following abbreviations should be used consequently (except in the title and all subtitles). All other abbreviations have to be explained in the manuscript at first usage, if aforementioned directions are not applicable. Abs. = absolute; anh. = anhydrous; b.p.; b.r. = boiling point, -range; calcd. = calculated; CC = column chromatography; conc. = concentrated; dec. = decomposition, eq. = equation; Fig. = figure; GC = gas chromatography, -chromatogram, HPLC = high performance liquid chromatography, -chromatogram; i.m. = intramuscular; i.p. = intraperitoneal; IR = infrared; i.v. = intravenous; lit. = literature value; m.p.; m.r. = melting point, -range; MS = mass spectrometry, mass spectrum; NMR = nuclear magnetic resonance spectrum; PC = paper chromatography, -chromatogram, % = per cent, percentage, p.o. = peroral; s.c. = subcutaneous; TLC = thin layer chromatography, -chromatogram; UV = ultraviolet; ADP, CDP, GDP, IDP, UDP = 5'-pyrophosphates of adenosine, cytidine, guanosine, inosine, uridine; AMP etc. = adenosine 5'-monophosphate etc.; ADP etc. = adenosine 5'-diphosphate etc.; ATP etc. = adenosine 5'-triphosphate etc.; CM-cellulose = carboxymethylcellulose; CoA and acetyl-CoA = coenzyme A and its acyl derivatives; DNA = deoxyribonucleic acid; EGTA = ethylene glycol-bis(β-aminoethyl ether)*N,N,N',N'*-tetraacetic acid; FAD = flavin-adenine dinucleotide; FMN = flavin mononucleotide; NAD = nicotinamide-adenine dinucleotide; NADP = nicotinamide-adenine dinucleotide phosphate; NMN = nicotinamide mononucleotide; RNA = ribonucleic acid; Tris = 2-amino-2-hydroxymethylpropane-1,3-diol.

SUBMISSION

Submission to this journal proceeds via e-mail. The manuscripts should be sent to pharmacia@bsphs.org.

GENERAL REMARKS

Manuscripts, which do not comply with the above guidelines, will be returned to the author for required changes. Only after compliance is established, will they be processed for reviewing.