

# collection

of Czechoslovak Chemical Communications

74/2009

Instructions for Authors 2009

version 6, update September 14, 2009

#### **INSTRUCTIONS FOR AUTHORS**

Please read these instructions carefully and follow them rigorously to ensure that the review and publication of your paper is as efficient and rapid as possible.

#### 1. Aims and Scope

The aim of the Collection of Czechoslovak Chemical Communications (*Collection*) is to publish in English both the results of original research and review articles covering broad areas of chemistry and biochemistry.

The copyright on papers published in *Collection* belongs to the Institute of Organic Chemistry and Biochemistry of the Academy of Sciences of the Czech Republic.

*Collection* publishes only contributions containing original, high-quality results that have not yet been published and are not intended for publishing elsewhere, except in the form of a preliminary communication.

All contributions are reviewed using the criteria of originality, quality, and length with regard to the content of new scientific information. Contributions that describe only routine extension of known results with little or no innovation will not be accepted for publication in *Collection*. Papers suitable for consideration will be sent to at least two referees. Authors are strongly encouraged to suggest the names and addresses of 3–5 suitable referees. Recommendations of referees need not always be followed by the editors, who accept full responsibility for decisions regarding the manuscripts.

Manuscripts must be submitted in English (a language revision will be provided free of charge if necessary).

The author receives one copy of proofs. Checking of proofs is the author's responsibility.

Every author whose e-mail address is published will receive a **free elec-tronic reprint** in pdf sent via e-mail as an attachment.

The following article types are covered by *Collection*:

**Full Papers** are conclusive reports on important, original research dealing with some aspects of pure chemistry. They should present new facts or provide a novel approach to an established topic. Papers of this type should be written in the style described under items 2.1–2.8.

**Accelerated Communications** are restricted to reports of sufficient and timely significance and of general interest, in order to justify rapid publication. In the cover letter, reasons must be given why it is neccessary to pub-

lish the manuscript as an accelerated communication. These papers are envisaged to be published within weeks after acceptance.

**Notes** are similar to full papers, with a detailed experimental section and complete sets of data, but they are more limited in scope than full papers.

**Reviews** are intended to attract a broad spectrum of potential readers by timely topics of both particular and general interest. The authors of reviews should be scientifically active in the field. The reviewed material must be logically assorted and critically evaluated, and clear conclusions should be made. The authors are also encouraged to outline potential future perspectives of development in the field. Authors of unsolicited reviews are urged to submit a summary (2–3 pages), containing the expected scope and extent of the review.

#### 2. Preparation of the Manuscript - General

All manuscripts must be submitted via the SCHOLARONE online system: http://mc.manuscriptcentral.com/cccc. Authors should first examine a recent issue of *Collection* for guidance with respect to current editorial practice and sample articles on the web. Careful preparation of the text and illustrations facilitates rapid publication.

All parts of the text must be double-spaced and margins of at least 3 cm should be all around each sheet.

All correspondence should be addressed to:

Collection of Czechoslovak Chemical Communications Flemingovo nám. 2 166 10 Prague 6, Czech Republic Telephone, fax: +420 220 183 559, e-mail: cccc@uochb.cas.cz http://cccc.uochb.cas.cz

The manuscript should be assembled in the following order: title page, summary, key words, introduction, experimental part (in synthetic chemistry papers this part may appear after results and discussion), results, discussion (including conclusions), list of symbols, acknowledgement (optional), references, tables, figures and figure captions, schemes, formulae, and graphic abstract. Results and discussion may be combined into a single section. Pages should be numbered consecutively from the beginning (title page) to the end (graphic abstract). When references concerning related papers are quoted by the author and such papers are not available to the referees because they are "in press" or "submitted" to another journal, one copy of such work must be included with the manuscript for the use of the referees and Editor.

#### 2.1. Title

It is important that the title of the manuscript should reflect concisely the purpose and results of the investigation in order to provide maximum information for a computerized title search.

The title should be followed by the authors' first names, initials of middle names, last names, as well as the addresses including e-mail adresses of all the authors. The name of the author to whom inquiries should be directed may be marked with an asterisk.

#### 2.2. Keywords

For all types of manuscripts, keywords, which best characterize the paper, should be given. Three keywords must be selected from the list available during the submission.

#### 2.3. Summary

Every paper must be accompanied by a summary (no heading, one paragraph only). The summary should clearly and briefly present the main object and results of the paper (100–200 words are usually adequate). The summary should be comprehensible without reading the paper. Abbreviations and reference citations should be avoided. Names or partial names of compounds should be accompanied by their numbers but the use of compound numbers alone is discouraged.

#### 2.4. Introduction

The introduction (no heading) should state briefly, with relevant references, the purpose of the investigation and its relation to other work in the appropriate field. All relevant citations should be included. Preferred form of citation of a series of papers on the same subject are "clusters" (see 2.8, example 2).

#### 2.5. Experimental

In the experimental section, materials, methods and procedures should be described in this order, in sufficient detail to enable other chemists to repeat the experiments. The instruments used as well as measurement conditions and corresponding physical units should appear in a paragraph at the beginning of the Experimental section. Description of standard techniques applicable throughout the work should follow the paragraph on instrumentation. Novel experimental procedures should be described in detail, but procedures already published should merely be referred to by literature citation. General reaction conditions should be given only once. Both weight amounts and molar equivalents of all reactants and weight amounts and percentage yields of products should be included. Whenever possible, elemental analyses should be provided for new compounds. However, the molecular formula may be determined from physical data (e.g., high-resolution MS) if evidence of purity is presented.

#### 2.6. Results and Discussion

Usually, the results are presented first, followed by a discussion of their significance. Only strictly relevant results should be given. The section may be further divided by subheadings. Equations, tables and figures should be used to shorten the text and make it readily understandable. Data should not be presented in duplicate.

#### 2.7. Symbols

If a number of symbols are used in the text and in equations, it is advisable to assemble the definitions and units of all symbols in a special section on a separate page of the manuscript.

#### 2.8. References

Bibliographic references should be numbered consecutively in the order in which they appear in the text (including tables and figure captions) by superscript numbers at the appropriate place and, if applicable, before punctuation. If the automatic reference collation system of a word-processing program is used, convert the references into the text before submitting the manuscript; otherwise they may disappear when typeset. Journals should be abbreviated according to the Chemical Abstract Service Source Index. In the case of patents and journals that are not easily accessible, the Chemical Abstracts reference should be quoted.

#### **Examples**:

Journals

- 1. Sejbal J., Klinot J., Buděšínský M., Protiva J.: Collect. Czech. Chem. Commun. 1997, 62, 1905.
- a) Dyason J. C., Healy P. C., Engelhardt L. M., Pakawatchai C., Patrick V. A., Raston C. L., White A. H.: *J. Chem. Soc., Dalton Trans.* **1985**, 831; b) Attar S., Bowmaker G. A., Alcock N. W., Frye J. S., Bearden W. H., Nelson J. H.: *Inorg. Chem.* **1991**, *30*, 4743.
- 3. Zenchevich Yu. G.: Zh. Anal. Khim. 1981, 36, 2197; Chem. Abstr. 1982, 97, 102034.
- 4. Hannick S. M., Kishi Y.: J. Org. Chem. 1983, 48, 3833; and references therein.

#### Books

5. Ueberla K.: Faktorenanalyse, p. 33. Springer, Berlin 1971.

6. Guggenheim E. A., Stokes R. H. in: *The Encyclopedia of Physical Chemistry* (R. A. Robinson and H. D. Conway, Eds), 2nd ed., Vol. 1, p. 25. Haywood, Oxnard 1983.

#### Proceedings and Abstracts

- 7. Benoiton N. L., Chen F. M. F.: Peptides 1990. Proc. 21st Eur. Pept. Symp., Platja d'Aro, September 28, 1990 (E. Giralt and D. Andreu, Eds), p. 47. ESCOM, Leiden 1991.
- 8. Bold G. F.: Presented at 3rd Int. Conf. Stereochemistry, Liblice, April 1, 1988.

#### Miscellaneous

- 9. Sato Y., Urukawa S. (Fujisawa Chemicals): Japan 1 532 748; Chem. Abstr. 1971, 71, 1493.
- 10. Rosenstern M.: M.S. Thesis. Charles University, Prague 1988.
- 11. Rosenstern M.: Ph.D. Thesis. Charles University, Prague 1992.
- 12. Sheldrick G. M.: SHELX76, Program for Structure Determination. University of Cambridge, Cambridge 1976.
- 13. Guthrie C.: Private communication.
- 14. Francesconi E.: Unpublished results.
- 15. Ahr Y., Wolff A.: Steroids, in press.

## 2.9. Graphic Abstract

The graphic abstract serves the purpose of rapid information and encourages the reader to read the paper. The abstract should clearly present the contents of the paper using a short text and/or graphics (scheme, figure, graph, formula). The actual size of graphic abstract and the space available are shown below. Collect. Czech. Chem. Commun.<br/>2000, 65, 83-98Synthesis of 2,2'-Bipyridines with<br/>Axially Chiral 1,1'-Binaphthalene Units<br/>Jana Hodačová and Ivan StiborJana Hodačová and Ivan Stibor

# 3. Preparation of the Manuscript – Detailed Information

# 3.1. Physical Units and Their Symbols

SI quantities, units and symbols should be used as much as is reasonably possible. A more detailed list of units and symbols with specific application to chemistry is given in the IUPAC Manual of Symbols and Terminology for Physicochemical Quantities and Units (Pergamon Press, Oxford 1993). Non-SI units must be explained unless their definition is obvious.

# 3.2. Abbreviations

Abbreviations and acronyms should agree with international (preferably Chemical Abstracts version) usage. Apart from common abbreviations the authors are free to abbreviate frequently mentioned terms. However, such abbreviations should be explained, either when they first appear in the text, or in Symbols.

# 3.3. Nomenclature and Terminology

All nomenclature and terminology should be consistent, clear and unambiguous. It is the author's responsibility to provide correct names and terms. Nomenclature and terminology should conform as closely as possible with the rules of the International Union of Pure and Applied Chemistry (IUPAC) and of the International Union of Biochemistry and Molecular Biology. The Index Guide of Chemical Abstracts should be consulted as an additional guideline.

#### 3.4. Mathematical and Chemical Equations

All equations should be designated with Arabic numerals in parentheses. Distinction must be made between such ambiguous symbols as the letter l and the numeral one, the letter O and the numeral zero.

#### 3.5. Formulae and Schemes

Structural formulae, including schemes, must be drawn on a separate sheet. The position of the formulae in the text should be marked in the manuscript. Formulae should be numbered with bold Arabic numerals (in parentheses if they follow the complete names of compounds).

Formulae in plain text should be numbered consecutively. It might be more comprehensible to describe the compounds by their functional class names (*e.g.*, ketone 7) than by their formula numbers only. Authors are encouraged to supply reaction schemes whenever they may help the reader in understanding reaction sequences. Structures with the same skeleton but containing different substituents could be condensed into a single formula with symbols  $\mathbb{R}^1$ ,  $\mathbb{R}^2$ ,  $\mathbb{R}^3$ , etc., representing the substituents. It is useful to denote such derived formulae by adding lower-case letters (**1a**, **1b**, **1c**, *etc.*).

Authors who use ChemDraw or ISIS Draw programs should paste the formulae or schemes into the main document or send them as separate Word files. When using ChemDraw: (i) apply ACS settings from the menu, (ii) schemes or formulae must not exceed 12 cm in width.

#### 3.6. Figures

The number of figures should be kept as small as possible. Color figures can be printed provided that, in judgement of the Editor, the color is essential to convey scientific information. Figures must be numbered consecutively with Arabic numerals. Graphs should be enclosed in frames, with axes not extending appreciably beyond the curves. Recommended size for figures is  $(10-15) \times (10-15)$  cm. All drawings should be of the same size or, at least, of the same height. The curves should be drawn in slightly heavier line than the axes. **The lines should be thick enough and the symbols big enough to allow photographic reduction to the printing size (5.5 cm base)**. Use **only** the following symbols which are readily available:  $\bigcirc$ ,  $\bigoplus$ ,  $\triangle$ ,  $\blacktriangle$ ,  $\bigtriangledown$ ,  $\square$ ,  $\blacksquare$ .

Individual curves may also be distinguished by various type of lines and should be labelled with Arabic numerals. The final lettering in figures will be done in the Editorial Office. Each figure must be accompanied by a short legend.

# 3.7. Guidelines for Generating Graphics Suitable for Electronic Reproduction

Electronically generated graphics should be stored in one of the following formats: TIFF, JPEG, PDF, EPS or doc file. For halftone or color images, the resolution must be at least 300 dpi.

### 3.8. Tables

Tabulation of experimental results is encouraged whenever leading to more effective presentation. However, duplication of information contained in tables or figures should be avoided. Tables should be typed on separate sheets and their position in the text should be indicated. Tables should be numbered consecutively with Roman numerals. Each table should be supplied with an informative heading making its general meaning comprehensible without reference to the text. Column headings should be brief. Columns containing very few entries should be replaced by footnotes. Footnotes should be denoted by small letter superscripts; the lettering should proceed by lines rather than by columns. The number of footnotes should be kept as small as possible.

#### 3.9. Presentation of NMR Spectra

The data should be presented in the following order: NMR type, working frequency and solvent in parentheses, chemical shift, multiplicity, integral intensity, coupling constant(s), assignment in parentheses. Example: <sup>1</sup>H NMR (500 MHz,  $CDCl_3$ ): 9.82 s, 2 H (NH); 8.91 t, 2 H, J(4',2') = 2.1 (H-4').

#### 3.10. Crystallographic Data

Manuscripts reporting structure determination by X-ray diffraction must adhere to the following requirements. *Abstracts* may summarize geometric features but should not contain unit cell parameters. *Body of Manuscript*: Tables of essential interatomic distances and angles are not required, but may be submitted if necessary for discussion. For structures with anisotropically refined atoms, a labelled figure displaying thermal ellipsoids (ORTEP) should be presented; a spherical-atom representation may be substituted if necessary for clarity. If intermolecular interactions are relevant to discussion, a view of the unit cell may be included. Positional and thermal parameters will not be printed except in the cases where these data are necessary for explaining special problems of chemical significance. A full paper should list for each structure the formula, formula weight, crystal system, space group, crystal color, unit cell parameters, and values of Z, R, and GOF. A brief description of measurement, data collection, and solution and refinement of the structure (including H atoms), should be placed in the experimental section.

Authors should deposit their data **before** submitting their manuscripts, so that the referees and Editor can retrieve the information directly from the database. In addition, sending the "cif" file as Supplementary materials during the submission would be very helpful and desirable.

For *organic and organometallic compounds* send your data to the Cambridge Crystallographic Data Centre (CCDC) as an ASCII file by e-mail or as a hard copy (Cambridge Crystallographic Data Centre, 12, Union Road, Cambridge, CB2 1EZ, UK; fax: +44 1223 336033; or deposit@ccdc.cam.ac.uk).

The data will be assigned a registry number, which should be referred with the following standard text in the manuscript: "CCDC ...... contains the supplementary crystallographic data for this paper. These data can be obtained free of charge via www.ccdc.cam.ac.uk/conts/retrieving.html (or from the Cambridge Crystallographic Data Centre, 12, Union Road, Cambridge, CB2 1EZ, UK; fax: +44 1223 336033; or deposit@ccdc.cam.ac.uk)."

For *inorganic compounds*: The Fachinformationszentrum (FIZ) Karlsruhe only accepts data deposit in electronic form. Send the data by e-mail, on disk, or by FTP (in the last case, contact the FIZ beforehand) to FIZ, D-76344 Eggenstein-Leopoldshafen, Germany; fax: (+49) 7247-808-666; e-mail: crysdata@fiz-karlsruhe.de; FTP: ftp.fiz-karlsruhe.de (path: /pub/csd); http://www.fiz-karlsruhe.de under Products and Services . You will be given a CSD number, which should be included with the following standard text in the manuscript: "Further details of the crystal structure investigation(s) can be obtained from the Fachinformationszentrum Karlsruhe D-76344 Eggenstein-Leopoldshafen (Germany), e-mail: crysdata@fiz-karlsruhe.de on quoting the depository number(s) CSD-...".