# IFAC

International Federation of Automatic Control

# INSTRUCTIONS FOR AUTHORS

*These instructions are for authors preparing scripts for presentation at IFAC technical meetings*

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**IMPORTANT NOTICE**

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# PUBLICATION OF PAPERS PRESENTED AT IFAC TECHNICAL MEETINGS

1. Papers presented at IFAC Symposia and Workshops may be published in the following ways:

   1.1 **As a paper in a Proceedings volume**. The author must send the paper in the required format (either as camera-ready copy or as electronic files) to the meeting editor and must attend the technical meeting in person or send a proxy to present his/her paper.

   1.2 **As an expanded paper in a special section of *Automatica* or *Control Engineering Practice***. The technical meeting editor may recommend the paper to the editor-in-chief of either journal.

   1.3 **As an expanded paper submitted independently by the author to *Automatica* or *Control Engineering Practice***. Even if the meeting editor does not recommend his/her paper to the editor-in-chief of either *Automatica* or *Control Engineering Practice*, the author may submit his/her paper independently to either journal.

   1.4 **As a paper in a special issue or section of an IFAC-affiliated journal**. The meeting editor may recommend the paper to the journal editor, who will tell the author. The affiliated journal editor will establish that the paper is not being considered for *Automatica* or *Control Engineering Practice.*

   1.5 **As a paper in an IFAC-affiliated journal**. Provided that the paper has not been chosen for *Automatica* or *Control Engineering Practice*, the author may submit his/her paper independently to the affiliated journal of his/her choice. A list of IFAC-affiliated journals can be obtained by contacting the IFAC Secretariat.

2. The Proceedings of a technical meeting (1.1) will contain all the papers presented at the meeting which have passed the refereeing procedure of the meeting. There is no quota system as in the past. Proceedings volumes may be purchased from the publishers, Elsevier Science Ltd.

3. All papers published in Proceedings are recorded in *Control Engineering Practice.*

4. **Refereeing**

   Papers which appear in proceedings will have been refereed before being accepted for presentation. Papers for *Automatica, Control Engineering Practice* and IFAC-affiliated journals will be further refereed by the respective editors: substantial expansion and revision is often required to meet journal standards.

5. **Copyright**

   Authors must transfer the copyright in their papers to IFAC. If the paper is subsequently expanded and published in *Automatica, Control Engineering Practice* or an IFAC-affiliated journal (1.2–1.5), the copyright is automatically transferred to the journal under the provisions of the agreement between IFAC and Elsevier. If an author has not been notified that his/her paper is under consideration for one of these journals within three months after the meeting, he/she may submit the paper elsewhere, provided that he/she acknowledges its original publication in an IFAC Proceedings. Detailed copyright instructions are available from the IFAC Publisher.

6. **Preparation of papers (1.1)**

   Authors must follow the instructions exactly and must ensure that all parts of the paper are submitted. Papers which lack, for instance, an abstract or figure captions, may not be accepted for the preprints.

## INSTRUCTIONS TO AUTHORS FOR THE PREPARATION OF MANUSCRIPTS

**CAUTION: Papers may be omitted from the Preprints (by the Editor) or from the Proceedings (by the Publisher) if they do not conform to the following instructions.**

**SUBMISSION OF PAPERS:** Manuscripts must be sent to the Conference organisers in the manner specified in the information letter which accompanies these Instructions. Generally, manuscripts are required either as camera-ready-copy (CRC), or in electronic format as Postscript or PDF files. **Authors should ensure that, whichever method of transmittal is required, the following style and layout guidelines are adhered to exactly and that completed papers do not exceed the given page limit.**

Manuscripts must be in English. Authors whose mother tongue is not English are advised to obtain the help of a suitable colleague to ensure that the typescript is clear and grammatically correct.

Use of the first person ("I", "we", etc.) must be avoided.

Authors should consult the accompanying information letter or the conference organisers to determine whether the paper is required in either camera-ready copy or electronic format. Particular attention should then be paid to the following guidelines:

**For camera-ready copy:** The name of the author and page number must be written on the reverse of every sheet, using light blue pencil.

Sheets must not be folded.

Completed papers should be sent by registered mail or courier service to the address given in the information letter. Ensure that the requested number of copies is enclosed.

**For electronic transmittal:** Files should be in Postscript or PDF format and should be e-mailed to the address given in the information letter. The covering e-mail message should include complete information about the paper including full contact details. Large files should be compressed as zip archives before submission.

Detailed instructions and guidelines for the preparation of PDF and Postscript files are available upon request from the Publisher. Note in particular that for PDF files, only type 1 fonts should be used, to minimise the risk of printing errors.

**TYPING:** Authors should prepare their manuscript in double column format for printing on A4 (8.3in × 11.7in/210mm × 297mm) paper, justified if possible, using Times Roman 10pt typeface, and must ensure that the typing area (centred) matches exactly that shown in the specimen pages.

**FORMAT**: The first page should include (a) Title (10 words is the desired maximum length). (b) Each author's name and affiliation, including present address. (c) Abstract (50–100 words), giving a brief account of the most relevant aspects of the paper. (d) 5–10 keywords taken from the keyword list at the end of this document.

Use single line spacing throughout.

Do not indent the initial lines of paragraphs. Leave a line clear between paragraphs.

Manuscripts should be prepared in the following order: *Introduction* to explain the background work, the practical applications and the nature and purpose of the paper, *Body* to contain the primary message, with clear lines of thought and validation of the techniques described, *Conclusion*, *Acknowledgements* (when appropriate), *References*, *Appendices* (when appropriate).

**Section headings** should be centred, in capital letters and numbered consecutively, starting with the *Introduction*. Sub-section headings should be in capital and lower-case *itali*c letters, numbered *1.1*, *1.2*, etc, and left justified, with second and subsequent lines indented.

All figures and equations to be numbered with Arabic numerals (1,2……n)

**Tables**: All figures should be numbered with Arabic numerals. Headings should be placed above tables, underlined and centred. Leave one line space between the heading and the table.

Only horizontal lines should be used within a table, to distinguish the column headings from the body of the table.

**Illustrations**: All photographs, schemas, graphs and diagrams are to be referred to as **figures**.

Line drawings should be original and not photocopies.

Lettering and symbols should be clearly defined. Figures should be placed at the top or bottom of a column wherever possible, as close as possible to the first reference to them in the paper. They should be

restricted to single-column width unless this would make them illegible.

**Do not use coloured photographs or figures.**

The figure number and caption should be typed below the illustration, left justified, with subsequent lines indented.

Avoid hyphenation at the end of a line.

Symbols denoting vectors and matrices should be indicated in **bold type** or by a wavy underline. ***Italic*** letters may be indicated by underlining if an italic typeface is not available.

**Weights and measures** should be expressed in SI units. All non-standard abbreviations or symbols must be defined when first mentioned, or a glossary must be provided.

**Footnotes** should be avoided if possible. Necessary footnotes should be denoted in the text by consecutive superscript numbers. The footnotes should be typed single spaced, and in smaller typesize, at the foot of the column in which they are mentioned, and separated from the main text by a line extending to just over halfway across the column (see specimen pages). Leave a one-line space above and below this line.

**References**. In the text the surname of the author and the year of publication of the reference should be given. Two or more references by the same authors published in the same year should be differentiated by letters a,b,c etc. For references with more than two authors, text citations should be shortened to the first name followed by *et al.*

Jones (1965, 1968a, b, 1971b) discovered that …

Recent results (Brown and Carter, 1985; Green *et al.*, 1986) indicate that …

*Only essential references, which are directly referred to in the text, should be included in the reference list.*

References must be listed in alphabetical order at the end of the paper. References to the same author(s) should be in chronological order.

**Journal references** should include: author's surname and initials; initials and surnames of remaining authors; year of publication (in brackets); article title (where provided); abbreviated journal title (in *italics*), volume number and page numbers.

**References to books** should include: author's surname and initials; initials and surnames of remaining authors; year of publication (in brackets); the book title (in *italics*; the name of the publisher and place of publication. References to multi-author works should include after the year of publication: the chapter title (where provided); "In:" followed by book title (in *italics*); initials and name(s) of editors(s) in brackets; volume number and pages; the name of the publisher and place of publication.

References should appear in the following form:

Abell, B.C. (1945). The examination of cell nuclei. *Biochemical Journal*, **35**, 123–126.

Abell, B.C. (1956). Nucleic acid content of microsomes. *Nature*, **135**, 7–9.

Abell, B.C., R.C. Tagg and M. Push (1954). Enzyme catalyzed cellular transaminations In: *Advances in Enzymology* (A.F. Round, Ed.). Vol. 2, pp. 125–247. Academic Press, New York.

Baker, R.C. (1963a). *Microscopic Staining Techniques*. Butterworth, London.

Baker, R.C. (1963b). Methods of preparing thin-section slides. *Journal of the British Medical Association*, **34**, 184–186.

Charlie, F.H. and M.B. Routh (1966). The chemical determination of toxins. *Journal of the American Chemical Society*, **66**, 267–269.

Dog, P.R. (1958). In: *Chemical Carcinogenesis* (R.W. Brown, Ed.), Vol. 1, Chap. 7, pp.56–98. Chapman & Hall, London.

**Offprints** can be purchased at a reasonable cost if ordered when the paper is accepted for publication.

**Disposal of scripts**. The original manuscript and diagrams will be discarded one month after publication unless the publisher is requested to return the original manuscript to the author.

**Style file.** IFAC is able to offer a LaTeX style file to authors preparing articles for IFAC Proceedings volumes (see checklist). By using this style, the author can easily format an article (including the bibliography) according to the instructions given to authors by Elsevier Science. The time-consuming check of all typographic details is no longer needed.

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**Papers may be omitted from the Preprints (by the Editor) or from the Proceedings (by the Publisher) if they do not conform to the above instructions.**

**SAMPLE PAGES TO BE FOLLOWED EXACTLY IN PREPARING SCRIPTS**

# THE TITLE OF THE PAPER, IN BOLD CAPITAL LETTERS, CENTRED, NOT MORE THAN 10 WORDS

↵
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**Names of the Authors, upper and lower case, boldface, centred, 125 mm (5 in) width**

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↵

Authors' affiliations, Italics, upper and lower case, centred, 125 mm (5 in) width (maximum)

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Abstract: Abstract of 50–100 words, 125 mm (5 in) width (maximum), justified Xxxx xxxx xxx xxx xx xxxxxxx xxxxxxxx xx x xxxxxx xxxxxxxxx xxxxx xxxxxxxxxx xxxxxx xxxxxxxxxxxxxxxx xxxxxxxxxx xxxxx xxxxxx xxxx xxxxxx Please insert a copyright notice (in *italics*) following the last word in the abstract as shown in this example. The year is the year in which the IFAC meeting was held. *Copyright © 2000 IFAC*

↵

Keywords: 5–10 keywords (taken from the IFAC list), 125 mm (5 in) width (maximum), left justified.

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## 1. MAIN HEADING, CENTRED, CAPITAL LETTERS[1]

↵

Text of paper, 76 mm (3in) column width, with 8 mm (.3in) space between. Use full 253 mm (10 in) column length. Paragraphs should be justified, using single spacing, with no paragraph indentation. Use Times Roman font, 10 point. Leave one clear line between paragraphs within a section; two clear lines before a main or secondary heading.

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### *1.1 Secondary Heading, numbered, left justified, following lines indented, Italics or underlined.*

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Avoid leaving a heading at the bottom of a column, with the subsequent text starting at the top of the next page/column. Use extra spacings (between earlier figures or sections) to push the heading up to the top of the same column as its text. In view of the tight page constraints, however, do please make the fullest possible use of the text area.

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[1]Number footnotes consecutively with superscript numbers. Leave a one-line space above and below the footnote line. The character "↵" is used here to represent a space equivalent to one line of text.

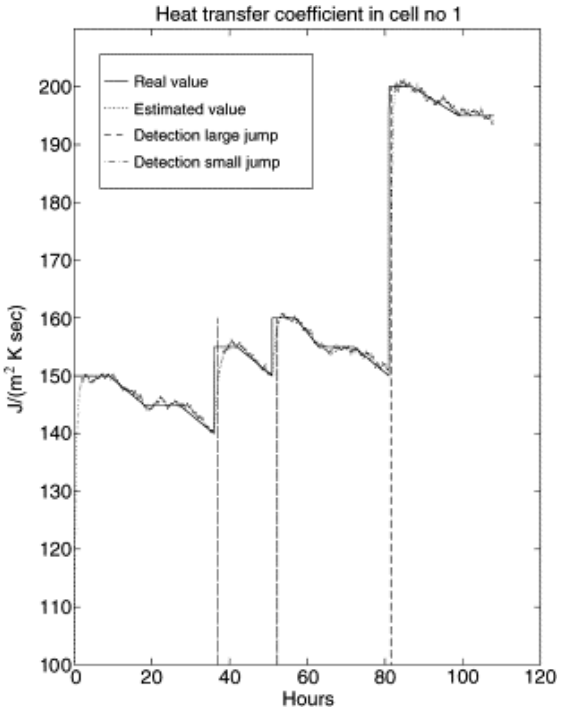


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Fig. X. Title of figure, left justified, subsequent text indented. Place figures at the top or bottom of a column wherever possible, as close as possible to the first references to them in the paper. Restrict them to single-column width unless this would make them illegible. Do **not** use coloured photographs or figures.

↵

Where a **publication** is referred to in the text, enclose the authors' names and the date of publication within the brackets, see (Brown, *et al*., 1994). For one author, use author's surname and the date (Smith, 1991). For two authors, give both names and the date (Smith and Jones, 1992). For three or more authors, use the first author, plus "*et al.*", and the date (Morris, *et al*., 1990a). If giving a list of references, separate them using semi-colons (Brown, *et al*., 1994; Smith, 1991; Smith, and Jones, 1992; Morris, *et al.*, 1990b).

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Put only the date in brackets when referring to the **author(s)** of the referenced publication (for example, "This work was first developed by Smith (1991), and later expanded by Brown, *et al.* (1994), who demonstrated that……").

Table 1 Heading underlined and centred. Do not use vertical lines within the table; use horizontal lines only to separate headings from table entries

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|---|---|---|---|---|
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When starting a new paragraph at the top of a column, be careful that the line space before it does not prevent the tops of the two columns from lining up.x xxxxxx xxxxxx xxxxx xxxxx xxxxx xxxxxxx xx xxxxxx x xxxxxx xxxxxx xxxxxx xxxx xxxx x xxx xxx xxxxx.

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Equations are centred and numbered consecutively, from 1 (n)

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## REFERENCES

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List of references arranged alphabetically according to first author, subsequent lines indented. Do not number references. Publications by the same author(s) should be listed in order of year of publication. If there is more than one paper by the same author(s) and with the same date, label them a,b, etc. (Morris *et al*., 1990a, b). Please note that **all** references listed here must be directly cited in the body of the text.


Brown, F., M.G. Harris and A.N. Other (1994). Name of paper. In: *Name of book in italics or underlined* (Name(s) of editor(s). (Ed)), page numbers. Publisher, Place of publication.

Smith, S.E. (1991). *Name of book in italics or underlined*, page or chapter numbers if relevant. Publisher, Place of publication.

Smith, S.E. and L. Q. Jones (1972). Name of paper. *Name of journal in italics or underlined*, **Volume no in bold,** page numbers.

Morris, K.J., A.C. Davies and J.M. Katz (1990a). *Xxxx x ixxxxxxxx xxxxxxxx xxxxxx* pp. xx–xxx Xxxxxxx. Xxxxx, X. X. X.

Morris, K.J., A.C. Davies and J.M. Katz (1990b), Xxxxxxxxxxx xx xxx xxxxxxxxxxx xxx xxxxxxx xxxxxxxxx xxxxxxx In: *Xxxxxxxx* Xxxxxxxx xxxx (X.xxxxxxxx (Ed.)).xxx.

## CHECKLIST FOR THE PREPARATION OF SCRIPTS

- ❑ Full **type area used** (253 mm × 160 mm/ 10 in× 6.3 in)
- ❑ Type area **centred** on the page
- ❑ Correct **column length** (253 mm / 10 in)
- ❑ Correct **column width** (76 mm / 3 in)
- ❑ Correct **inter-column space** (8 mm / 0.3 in)

- ❑ **Type**: Font: Times Roman
- ❑ Size: 10 point
  (for **all** text, including headings – only abstract and footnotes may be smaller)

- ❑ **Title**: Bold, upper-case letters
- ❑ Placing (as sample pages)
- ❑ Centred
- ❑ Not more than 10 words

- ❑ **Authors:** Correct placing (2 lines left clear after Title)
- ❑ Bold, upper- and lower-case letters
- ❑ Centred

- ❑ **Affiliations**: Placing (2 lines clear after Authors)
- ❑ Italics
- ❑ Centred

- ❑ **Abstract**: Narrow format (125 mm/5 in)
- ❑ Placing (4 lines clear after Affiliations)
- ❑ Justified
- ❑ 50–100 words

- ❑ **Keywords**: 5–10, from IFAC keyword list
- ❑ Place (1 line clear after abstract)
- ❑ Narrow format (125 mm/5 in)
- ❑ 4 lines left clear before the start of the main body of the text

- ❑ **Paragraphs**: No indentation at start
- ❑ 1 line left clear between paragraphs

- ❑ **Main headings**: Capital letters
- ❑ Numbered
- ❑ Centred
- ❑ 2 lines left clear above; 1 below

- ❑ **Secondary headings**: Upper and lower case
- ❑ Numbered
- ❑ Left justified
- ❑ Italics (or underlined)
- ❑ 2 lines left clear above; 1 below

- ❑ **Tertiary headings**: Upper and lower case
- ❑ Run-on text
- ❑ Not numbered
- ❑ Italics (or underlined)
- ❑ 1 line left clear above

- ❑ **Figures**: Acceptable line quality
- ❑ Legible text
- ❑ Inserted appropriately in the text
- ❑ Single-column width if possible

- ❑ **Figure captions**: Below figures
- ❑ Left justified
- ❑ Subsequent lines indented

- ❑ **Tables**: Headings above
- ❑ Headings centred and underlined
- ❑ No vertical lines/boxes
- ❑ Horizontal lines only to indicate headings

- ❑ **References:** Not numbered
- ❑ Alphabetical listing
- ❑ Subsequent lines indented
- ❑ Correct usage within the text
- ❑ **All** references cited in text

- ❑ **Language**: Spelling checked
- ❑ Grammar and use of English checked
- ❑ Use of "I/we" eliminated

**BEFORE SENDING**

- ❑ Copyright clearance form completed
- ❑ Offprint order form completed, if required
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automatica

A Journal of **IFAC,** the International Federation of Automatic Control

# Publication of IFAC Meeting Papers

In announcements for IFAC meetings, the IFAC copyright policy for submitted papers is summarized. It includes the statement:

"Any paper submitted for an IFAC event is automatically considered for publication in *Automatica* or *Control Engineering Practice.*"

In order to prevent any misinterpretation, a further explanation about the procedures involved in publishing IFAC meeting papers in *Automatica* is given below.

*The statement does NOT mean that all papers submitted for IFAC meetings are formally reviewed for possible publication in Automatica*. Instead, papers of high quality and general interest are recommended by the meeting organizer and/or editors for further review and evaluation by the *Automatica* Editorial Staff. Preferably these recommendations are made quickly on the basis of preliminary reviews required to select papers for the meeting programme. Additional recommendations may be obtained from *Automatica* Editors and Associate Editors later on the basis of the preprinted paper or perhaps the presentation of the paper. Often these recommendations are delayed until after the meeting has been held.

Each recommendation is sent to an *Automatica* Editor, who usually requests the author of the recommended paper to submit a modified, often expanded, version of the paper for possible publication in *Automatica* after further review and evaluation by the *Automatica* Editorial Staff. *The reason for requesting a modified version of the paper is that the criteria for accepting Automatica papers are much different from those used for IFAC meeting papers*. IFAC meeting papers must usually be written in a relatively short time to provide a record of the basic ideas conveyed in the presentation of the paper. Generally, background information, development and computational details, and experimental verification are not included. In addition, the length of meeting papers must be limited to meet the publication constraints of the Preprint or Proceedings in which they are published. *Automatica* papers, however, contain additional background material to greater detail in the development, more depth, more examples, and specific results, if available, to give the papers more of an archival nature. Although the length of *Automatica* papers must also be constrained, the constraints are not as rigid or severe as are those for meeting papers.

If within three months after the end of the meeting you have not been notified by an *Automatica* Editor that your paper is under review for possible publication in *Automatica*, you may assume that IFAC's copyright has been released.

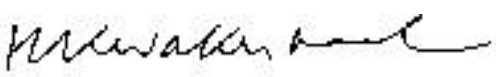
*If you wish to have your paper considered immediately for possible publication in* Automatica *without waiting for recommendation, and if you believe that it meets the high standards required for* Automatica*, including a potential archival value, then please do the following:*

a) Modify it to include required background material, adequate detail of the development, more examples, specific results, and especially experimental data, if available. The length of the modified paper must not exceed the maximum length established for *Automatica*, as indicated on the inside back cover of the Journal.

b) Send six, single column, double spaced copies of your modified paper directly to the *Automatica* Editor who has interests most closely related to the subject of your paper and one copy to the Editor-in-Chief. The addresses and interests of the Editors are listed overleaf for your convenience. Do not include originals of the figures, photographs or biographies. These will be requested at a later date.

Note that if the modified version of your submitted paper does not appear to meet the high standards typical of *Automatica* papers, it may be returned immediately with appropriate comments without being subjected to the formal review procedure. However, without reviews this action is not an irrevocable rejection.

I hope that these notes clarify the *Automatica* publication policy.



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Norwegian University of Science and Technology
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**System Parameter Estimation**
(including applications in this field, and new topics such as system fault detection)

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**Nonlinear Systems and Control**

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(including all fields in automatic control)

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(in all fields of control)

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## automatica: **Aims and Scope**

***Automatica*** publishes papers on original theoretical and experimental research and development in the control of systems, involving all facets of automatic control theory and its applications. Preferably, theoretical papers should include applications; papers dealing with components and systems should include theoretical background and, where appropriate, economic implications.

It is intended to publish only those papers, including those based on IFAC meeting presentations, which may be regarded as new, worthwhile contributions in this field. Papers should be intelligible to the general body of control engineers, which requires that specialized techniques, terminology and acronyms be well defined and/or referenced.

***Automatica*** has a tradition of publishing definitive papers covering a topic in depth, papers which are referred to for many years. For such papers the length requirements may be relaxed at the discretion of the Editor-in-Chief.

The scope of the journal is extensive. Topics include: the theory and design of control systems and components, encompassing robust and distributed control using geometric, optimal, stochastic and nonlinear methods, game theory and state estimation; adaptive control, including robotics, neural networks, parameter estimation and system fault detection; additional topics including artificial intelligence, fuzzy and expert systems, hierarchical and man–machine systems, all parts of systems engineering which consider the reliability of components and systems; data processing; and computers for computer-aided design, manufacturing, and control of various industrial processes, space vehicles and aircraft, ships, traffic, biomedical systems, national economies, power systems, agriculture and natural resources.

Submitted articles may be Survey Papers (extensive reviews of established or emerging research topics or application areas), Papers (detailed discussions involving new research, applications or developments), Brief Papers (brief presentations of new technical concepts and developments), Technical Communiqués (new useful ideas and brief pertinent comments of a technical nature), and Correspondence (Letters to the Editor about the journal or to authors commenting on previously published papers. In the latter case, the Editor will give the authors an opportunity to respond). The journal also publishes the following features: Special Issues on the subject of increasing importance, Tutorial Papers, Book Reviews and Software Reviews.

Additional information about ***Automatica***, including lists of recently accepted papers and papers under review, a cumulative table of contents (1963–present) and recent and advance editorials, can be found at the Editor-in-Chief's site: http://www.math.utwente.nl/eic.

### ASPECTS CONSIDERED BY REVIEWERS OF PAPERS FOR *AUTOMATICA*

Every reviewer of a paper submitted for publication in ***Automatica*** is asked to respond to the following questions:

1. Does the Introduction state the purpose of the paper?
2. Is the significance of the paper explained relative to previous work?
3. Is the paper clearly written and well organized?
4. What is the contribution of the paper?
5. How may the paper be improved?

The reviewer is moreover asked to rate the contribution of the paper and its quality, to provide an overall recommendation and to advise in which category the paper should be published.

Finally, the review form provides extensive space for comments to the authors, which are considered very seriously by the editors.

Based on the reviews the Associate Editor prepares a publication recommendation to the Editor who is responsible for the paper.

# CONTROL ENGINEERING PRACTICE

A Journal of **IFAC,** the International Federation of Automatic Control

## Publication of IFAC Meeting Papers

In announcements for IFAC meetings, the IFAC copyright policy for submitted papers is summarized. It includes the statement:

"Any paper submitted for an IFAC event is automatically considered for publication in *Automatica* and *Control Engineering Practice.*"

In order to prevent any misinterpretation, a further explanation of the procedures involved in publishing IFAC meeting papers in *Control Engineering Practice* is given below.

*The statement does NOT mean that all papers submitted for IFAC meetings will be formally reviewed for possible publication in Control Engineering Practice*. Instead, application-oriented papers of high quality and general interest are recommended by meeting organizers and/or Editors for further review and rapid evaluation by the *Control Engineering Practice* staff. These recommendations are made quickly on the basis of the preliminary reviews required to select papers for the meeting programme. Of course, these recommendations are delayed until after the meeting has been held, and papers which are not presented at the meeting will not be recommended. (However, authors may send meeting papers for possible publication in *Control Engineering Practice*, either before or after the meeting is held, without a recommendation, using the procedure described below.)

If you wish to have your paper considered individually for possible publication in *Control Engineering Practice*, then please follow the steps outlined below:

- Send 4 copies of the paper to the Editor-in-Chief.
- State clearly in an accompanying letter that the paper has been accepted for/presented at an IFAC event.
- Give the name of the event.

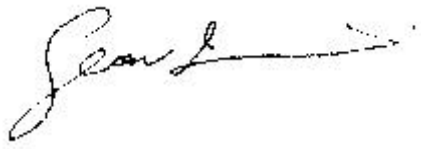
You may also send an *expanded* version of an event paper for consideration: in that case:

- Prepare the expanded manuscript in single-column, double-spaced format ($LaTeX$ users may use the standard `elsart` style file).
- Manuscripts should be prepared according to the order:
  Title, Author(s) name(s), Address(es), Abstract, Keywords, Introduction, Body, Conclusion, Acknowledgements, References, Appendices, Figure captions, Figures, Table captions, Tables.
- Send 4 copies to the Editor-in-Chief.
- Give the name of the IFAC event at which the original is to be/was presented.

Papers accepted for publication will be typeset from authors' disks. However, **please do not send disks** until the technical content has been accepted and the paper has been edited for language. Detailed instructions will be sent to the authors of accepted papers.

Note that if your submitted paper does not appear to meet the standard typical of *Control Engineering Practice* it may be returned immediately with appropriate comments.

I hope these notes will clarify the *Control Engineering Practice* publication policy.



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## CONTROL ENGINEERING PRACTICE: Aims and Scope

***Control Engineering Practice*** strives to meet the needs of industrial practitioners and industrially related academics and researchers. It publishes papers which illustrate the direct application of control theory and its supporting tools in all possible areas of automation. As a result, the journal contains only papers which can be considered to have made significant contributions to the application of control techniques. It is normally expected that practical results should be included, but where simulation only studies are available, it is necessary to demonstrate that the simulation model is representative of a genuine industrial application.

In addition to purely technical applications papers, the journal carries papers on topics linked to the application of automation, including social effects, cultural aspects, project planning and system design, and economic and management issues.

The scope of ***Control Engineering Practice*** matches the activities of IFAC, including applications in: aerospace, marine systems, communication systems, biomedical engineering, pulp and paper processing, environmental engineering, scientific instrumentation, transportation and vehicles, power plant and other utilities, mining, mineral and metal processing, chemical and biotechnical process control, manufacturing technology, and production engineering.

The journal covers all applicable technologies, including: robotics, identification, signal processing, project management, autonomous vehicles, computer networking, modelling and simulation, human computer systems, components and instruments, adaptive and robust control, electromechanical components, model-based control techniques, fault detection and diagnostics, software engineering techniques, hydraulic and pneumatic components, real-time and distributed computing, intelligent components and instruments, architectures and algorithms for control, computer-aided systems analysis and design, software design, software verification and safety, and artificial intelligence techniques, including fuzzy control, neural networks and genetic algorithms.

### ASPECTS CONSIDERED BY REVIEWERS OF PAPERS FOR *CEP*

The questions listed below appear on the ***CEP*** Review Form, and are considered by the reviewers and editor when assessing papers for possible publication. Authors may, therefore, find it useful to bear them in mind when preparing papers for submission.

1. Is there an immediate "appeal" to a practising industrial engineer? Is the title explicit, attractive and interesting? Is the abstract clear and to the point, stressing both the specific application and the generic aspects of the work?

2. Does the Introduction clearly state the field of application ?

3. Is there real evidence of the practical industrial benefits of the technologies/methods introduced, e.g. where they were applied, and what improvements resulted? Does the Conclusion state these clearly? Work using simulations should have been properly validated for a real process. (Papers which are purely theoretical will be sent back to the authors after the preliminary assessment, and without further review.)

4. Are there generic aspects which make the work applicable beyond a narrow range of applications? Are these clearly brought out in the paper, so as to broaden its readership?

5. Is the paper correct technically?

6. Is there some aspect, in either theory or application, which is new or innovative?

7. Is the paper intelligible, but non-trivial, to a practising professional engineer in the field of intended application?

8. Is the paper intelligible, and of some relevance to, practising professional engineers in other fields?

9. Is the paper easy to read, i.e.
   - Is it to the point?
   - Is it grammatically and semantically simple and correct?
   - Are the figures, graphs, etc., clear, explicit and properly labelled?
   - Are the mathematics essential? Enough detail should be given so that numerical examples can be reproduced exactly, but mathematical proofs should be referenced, rather than spelt out in tedious detail.
   - Are the references complete, and relatively easy to obtain?
   - Is the length appropriate? Most papers will tend to be between 5 and 10 pages in length (final journal article), but shorter or longer papers are acceptable *if* their lengths are appropriate to their contents.

10. Survey/review papers should be authoritative and of high quality.

11. Finally,
    Would the paper justify the time spent by a busy person in reading it?
    Would the reviewer, or reader, learn something from it?

# IFAC KEYWORD LIST OF CONTROL TERMINOLOGY

## A

Absolute
  *error criterion*
  *measurement*
  *stability*
AC
  *conductivity*
  *converter machines*
  *losses wires*
  *machines*
  *tacho generators*
Accelerometers
Access times
Accuracy
Active
  *brake control*
  *compensation*
  *control*
  *elements*
  *filters*
  *narrow band suspension*
  *noise control*
  *vehicle suspension*
Actuating signals
Actuators
Ada tasking programs
Adaptation
Adaptive
  *algorithms*
  *arrays*
  *control*
  *correlation*
  *digital filters*
  *equalization*
  *equalizers*
  *filters*
  *systems*
A/D converters
Add-subtract time
Adders
Address
  *registers*
  *spaces*
Addressable location
  *addressing*
Addresses
Adjacency
Adjustment
Admittance
Aerospace
  *computer control*
  *control*
  *engineering*
  *trajectories*
Affine
Agents
Agile
  *control*
  *manufacturing*
Agriculture
Air
  *pollution*
  *traffic control*
Aircraft
  *control*
  *operations*
Alarm systems
Algebraic
  *approaches*
  *Riccati equations*
  *selection*
  *systems theory*
Algorithmic languages
Algorithms
All pass
  *elements*
  *filters*
Alternating magnetic fields
Ambient noise
Amplidyne
Amplification
Amplifiers
Amplifier systems
Amplifying elements
Amplitude
  *distortion*
  *locus*
  *modulation*
  *response*
Analog
  *computer control*
  *computers*
  *control*
  *multipliers*
  *signals/digital converters*
Analysis of variance
Analytic approximations
AND
  *elements*
  *operations*
Angular
  *acceleration*
  *deviation*
  *frequency*
  *momentum*
  *position*
  *velocity*
Antennas
Antilock braking systems
Antiskid
  *control*
  *devices*
Anti-spin regulation
Anti-wheelspin control
Applied neural control
Approximate analysis
Arc resistance
Architectures
Arithmetic
  *algorithms*
  *and logic units*
Arm
  *movements*
  *singularities*
ARMA
  *models*
  *parameter estimation*
Armatures
Array
  *filters*
  *processors*
Artificial intelligence
Assemblers
Assembly
  *language*
  *robots*
Astatic control
Asymptotic
  *analysis*
  *approximation*
  *properties*
  *stability*
Asynchronous sequential
  *logic*
Attenuation
  *correction*
  *observations*
Attenuators
Attitude
  *algorithms*
  *control*
  *gyros*
Attractors
Authentication
Auto correlation
  *functions*
Automata
  *theory*
Automated guided vehicles
Automatic
  *control*
    *(closed-loop)*
    *engineering*
    *(open-loop)*
    *systems*
  *controllers*
  *frequency control*
  *gain control*
  *operation*
  *people models*
  *process control*
    *(closed-loop)*
    *(open-loop)*
  *recognition*
  *regulators*
  *restart*
  *sequence control*
  *testing*
Automation
Automobile industry
Automobiles
Automorphism
Automotive
  *control*
  *emissions*
Autonomous
  *control*
  *mobile robots*
  *vehicles*
Autoregressive models
Autotransductors
Autotuners
Availability
Available time
Average values
Averaging control

## B

Backlash
Backpropagation
  *algorithms*
Backtracking
Back-up
  *controllers*
  *systems*
Bad data
  *identification*
Bandpass filters
Bandwidth
  *allocation*
    *voice networks*
  *coaxial probes*
  *electrical pulses*
  *measurements*
  *minimization problems*
Bang-bang control
Bank switching
Banyan networks
Batch
  *control*
  *modes*
Baud rates
Bearings only tracking
Behaviour
Behavioural science
Benchmark examples
Bessel functions
Bias
  *winding*
Bilinear
  *control*
  *systems*
  *transformations*
Binary
  *arrays*
  *coded decimal*
  *codes*
  *control*
  *decision systems*
  *elements*
  *images*
  *logic systems*
  *search trees*
  *signals*
  *storage elements*
  *tree architectures*
  *trees*
Binding
Bio control
Biocybernetics
Biomedical
  *control*
  *systems*
Bionics
Biotechnology
Bispectrum
  *estimation*
Bistability
  *devices*
Bistable multivibrators
Bistable trigger elements
Blackboard architectures
Block diagrams
Blow moulding
Bode diagrams
Boilers
Bolometers
Bond graphs
Boolean
  *algebra*
  *functions*
  *logic*
  *operations*
Boundary
  *conditions*
  *detection*
  *element method*
  *integral formulation*
  *value problem*
Bounded
  *disturbances*
  *noise*
Bounding method
Brain models
Brakes
Branches
Breadth-first searches
Breakpoints
Bridges
Brownian motion
Brushless motors
Bubbles
Buffer
  *amplifiers*
  *storage*
Bugs
Business process
  *engineering*
Bus multiprocess or systems
Butterworth
  *filter*
Bypass clutch control

## C

Cables
Cableway systems
Cache
  *coherence protocols*
  *memories*
Caches
CAD/CAM
  *models*
Calculators
Calculus
Calibration
CAM
Cameras
Cancellation
Capacitance
Capacitive compensation
Capacitively loaded
  *junctions*
Capacitor filters
Capacitors
Capacity
Cartesian
  *manipulators*
  *products*
Cascade
  *compensation*
  *control*
  *exciters*
CASE
Catastrophe
  *theory*
Categorical data
Cathode
  *follower*
  *ray tubes*
CD ROM
Cellular
  *automation*
  *logic*
  *neural networks*
Central
  *processing units*
  *processors*
Centralised control
Centre of mass
Centrifugal governors
Certainty
Chaos
  *theory*
Chaotic behaviour
Character recognition
Characteristic
  *curves*
  *equation*
  *impedance*
  *polynomials*
  *roots*
  *time*
  *vector*
Characters
Charge amplifiers
Chassis
  *control*
  *dynamometers*
Chattering
Cheap control
Checkpointing
Checkpoints
Checksums
Check valves
Chemical
  *industry*
  *microsensors*
  *sensors*
  *variables control*
Cholesky factorization
Chopper amplifiers
Circuit
  *models*
  *performance*
  *simulation*
  *switched networks*
Circuits
Classification
Classifiers
Clocking
Clocks
Clock synchronization
Closed-loop
  *control*
  *controllers*
  *gain*
  *identification*
  *phase angles*
  *systems*
  *transfer functions*
Closed loops
Closed queuing networks
CMAC
CNC
Coarse–fine
  *control*
  *relays*
  *switches*
Code
  *converters*
Coded modulation
Coders
Coding schemes
Coefficient of stability
  *perturbation*
Cognitive
  *science*
  *systems*
Coils
Coloured noise
Combinational
  *circuits*
  *networks*
Combinatorial
  *circuits*

# D

# E



# F

# N



# O



# P

# Q



# R

# W



# Y



# Z

# Published and Forthcoming IFAC Proceedings Volumes

(S) = Symposium (W) = Workshop (C) = Conference (TWC) = Triennial World Congress

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