



### TABLE OF CONTENTS

---

●	<b>Description</b>	<b>p.1</b>
●	<b>Audience</b>	<b>p.1</b>
●	<b>Abstracting and Indexing</b>	<b>p.2</b>
●	<b>Editorial Board</b>	<b>p.2</b>
●	<b>Guide for Authors</b>	<b>p.4</b>



ISSN: 0925-5273

### DESCRIPTION

---

The *International Journal of Production Economics* focuses on topics treating the interface between engineering and management. All aspects of the subject in relation to **manufacturing** and **process industries**, as well as **production** in general are covered. The journal is interdisciplinary in nature, considering whole cycles of activities, such as the product life cycle - research, design, development, test, launch, disposal - and the material flow cycle - supply, production, distribution.

The ultimate objective of the journal is to disseminate knowledge for improving industrial practice and to strengthen the theoretical base necessary for supporting sound decision making. It provides a forum for the exchange of ideas and the presentation of new developments in theory and application, wherever engineering and technology meet the managerial and **economic** environment in which industry operates. In character, the journal combines the high standards of a traditional academic approach with the practical value of industrial applications.

Articles accepted need to be based on rigorous sound theory and contain an essential novel scientific contribution. Tracing economic and financial consequences in the analysis of the problem and solution reported, belongs to the central theme of the journal. [Submissions](#) should strictly follow the Guide for Authors of the journal.

#### **Benefits to authors**

We also provide many author benefits, such as free PDFs, a liberal copyright policy, special discounts on Elsevier publications and much more. Please click here for more information on our [author services](#).

Please see our [Guide for Authors](#) for information on article submission. If you require any further information or help, please visit our support pages: <http://support.elsevier.com>

### AUDIENCE

---

Industrial engineers, production engineers, cost engineers, project managers.

## ABSTRACTING AND INDEXING

---

ABI/Inform  
Applied Science and Technology Index  
Contents of Recent Economics Journals  
Current Contents/Engineering, Computing & Technology  
International Abstracts in Operations Research  
Management Contents  
Engineering Index  
Engineering Information, Inc  
INSPEC  
RePEc  
PASCAL/INIST  
Research Alert  
Robotics Abstracts  
The Cost Engineer/Technical Abstracts  
Science Citation Index Expanded

## EDITORIAL BOARD

---

### **Editor-in-Chief:**

**R.W. Grubbström**, Dept. of Production Economics, Inst. of Technology, Linköping University, S-581 83, Linköping, Sweden

### **Asian-Pacific Editor:**

**T.C.E. Cheng**, Dean's Office, Fac. of Business, The Hong Kong Polytechnic University, 11 Yuk Choi Road, Hung Hom, Kowloon, Hong Kong

### **European Editor:**

**B. MacCarthy**, Nottingham University Business School, Nottingham, England, UK

### **North-American Editor:**

**P. Kelle**, Dept. of Information Systems and Decision Sci, E.J. Ourso College of Business Administration, Louisiana State University, 3197 CEBA, Baton Rouge, LA 70803, Louisiana, USA

### **Associate Editor:**

**O. Tang**, Linköping University, Linköping, Sweden

### **Editorial Board**

**P.J. Agrell**, Université Catholique de Louvain, Louvain-la-Neuve, Belgium

**S. Axsäter**, Lund University, Lund, Sweden

**W.L. Berry**, Ohio State University, Columbus, Ohio, USA

**L.E. Cardenas-Barron**, Monterrey Institute of Technology, Monterrey, Mexico

**A. Chikán**, Corvinus University of Budapest, Budapest, Hungary

**H. Ding**, Beijing Jiaotong University, Beijing, China

**S.M. Disney**, Cardiff Business School, Cardiff, Wales, UK

**A. Dolgui**, Ecole des Mines de Saint Etienne, St. Etienne cedex 2, France

**T. Durand**, Ecole Centrale Paris, Châtenay Malabry, France

**S.E. Elmaghraby**, North Carolina State University, Raleigh, North Carolina, USA

**W.G. Ferrell**, Clemson University, Clemson, South Carolina, USA

**B.E. Flores**, Texas A&M University, College Station, Texas, USA

**J.R. Freeland**, Virginia Commonwealth University, Charlottesville, Virginia, USA

**L.F. Gelders**, KU Leuven, Heverlee-Leuven, Belgium

**T.N. Goh**, National University of Singapore, Singapore, Singapore

**A. Gunasekaran**, University of Massachusetts Dartmouth, North Dartmouth, Massachusetts, USA

**H.H. Hinterhuber**, Leopold-Franzens-Universität Innsbruck, Innsbruck, Austria

**K. Hitomi**, Ryukoku University, Kyoto, Japan

**R.H. Hollier**, University of Manchester, Manchester, England, UK

**K. Inderfurth**, Otto-von-Guericke-Universität Magdeburg, Magdeburg, Germany

**K. Ishii**, Kanazawa University, Ishikawa, Japan

**M. Jin**, University of Tennessee - Knoxville, Knoxville, Tennessee, USA

**U.S. Karmarkar**, University of California at Los Angeles, Los Angeles, California, USA

**B.M.T. Lin**, National Chiao Tung University, Hsinchu, Taiwan, ROC

**T.M. Lin**, Taiwan Tech - National Taiwan Institute of Technology, Taipei, Taiwan, ROC

**R.J. Linn**, The Boeing Company, Everett, Washington, USA  
**H. Matsukawa**, Keio University, Yokohama, Japan  
**S. Minner**, Technische Universität München, München, Germany  
**T. Morton**, Carnegie Mellon University, Pittsburgh, Pennsylvania, USA  
**J.A. Muckstadt**, Cornell University, New York, New York, USA  
**D.N.P. Murthy**, University of Queensland, St. Lucia, Queensland, Australia  
**C. O'Brien**, Nottingham, Nottingham, England, UK  
**S. Park**, Seoul National University (SNU), Gwanag-Gu, Seoul, South Korea  
**L. Peccati**, Università Bocconi, Milano, Italy  
**J.-M. Proth**, Institut National de Recherche en Informatique et en Automatique (INRIA), Metz, France  
**L.E. Quezada**, University of Santiago, Santiago, Chile  
**D.S. Remer**, Harvey Mull College, Claremont, California, USA  
**B.H. Rho**, Sogang University, Seoul, South Korea  
**J. Rowcroft**, University of New Brunswick, Fredericton, New Brunswick, Canada  
**D.A. Samson**, University of Melbourne, Melbourne, Victoria, Australia  
**B.R. Sarker**, Louisiana State University, Baton Rouge, Louisiana, USA  
**C.A. Snyder**, Auburn University, Auburn, Alabama, USA  
**M.T. Tabucanon**, Asian Institute of Technology, Pathumthani, Thailand  
**J.M.A. Tanchoco**, Purdue University, West Lafayette, Indiana, USA  
**R. Teunter**, University of Groningen, Groningen, Netherlands  
**D.R. Towill**, University of Wales, Cardiff, UK  
**M. Tuominen**, Lappeenranta University of Technology (LUT), Lappeenranta, Finland  
**L.N. Van Wassenhove**, INSEAD, Fontainebleau, France  
**D.C. Whybark**, University of North Carolina School of Medicine, Chapel Hill, North Carolina, USA  
**J. Wijngaard**, Rijksuniversiteit Groningen, Groningen, Netherlands  
**S. Wu**, Tsinghua University, Beijing, China  
**H. Yamashina**, Matsue National College of Technology, Kyoto, Japan  
**C.A. Yano**, University of California at Berkeley, Berkeley, California, USA  
**P. Zipkin**, Duke University, Durham, North Carolina, USA

## GUIDE FOR AUTHORS

---

### **Your Paper Your Way**

We now differentiate between the requirements for new and revised submissions. You may choose to submit your manuscript as a single Word or PDF file to be used in the refereeing process. Only when your paper is at the revision stage, will you be requested to put your paper in to a 'correct format' for acceptance and provide the items required for the publication of your article.

**To find out more, please visit the Preparation section below.**

### **BEFORE YOU BEGIN**

Please check carefully that your manuscript complies with the Scope of the IJPE <http://www.elsevier.com/locate/ijpe>.

### **Ethics in publishing**

For information on Ethics in publishing and Ethical guidelines for journal publication see <http://www.elsevier.com/publishingethics> and <http://www.elsevier.com/journal-authors/ethics>.

### **Conflict of interest**

All authors are requested to disclose any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations within three years of beginning the submitted work that could inappropriately influence, or be perceived to influence, their work. See also <http://www.elsevier.com/conflictsofinterest>. Further information and an example of a Conflict of Interest form can be found at: [http://help.elsevier.com/app/answers/detail/a\\_id/286/p/7923](http://help.elsevier.com/app/answers/detail/a_id/286/p/7923).

A manuscript may have been published earlier in a different language, in a preliminary form as a Working Paper in a local university series, or in a PrePrint publication of a conference, etc. In all such cases, it is compulsory that the original publication is mentioned when submitting the manuscript. In most cases, it is advisable to include the original publication among the references. Where a closely related paper has been published by the author (or by one or more of the authors when the submitted paper has more than one author), it is important that the published paper is cited in the text of the submitted paper. The differences between the published paper and the submitted paper need to be clearly highlighted. Failure to do so may result in the paper being rejected without being sent for review. Please also see 'Copyright' and 'Retained author rights', below.

### **Submission declaration and verification**

Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see <http://www.elsevier.com/postingpolicy>), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify originality, your article may be checked by the originality detection service CrossCheck <http://www.elsevier.com/editors/plagdetect>.

### **Changes to authorship**

This policy concerns the addition, deletion, or rearrangement of author names in the authorship of accepted manuscripts:

*Before the accepted manuscript is published in an online issue:* Requests to add or remove an author, or to rearrange the author names, must be sent to the Journal Manager from the corresponding author of the accepted manuscript and must include: (a) the reason the name should be added or removed, or the author names rearranged and (b) written confirmation (e-mail, fax, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed. Requests that are not sent by the corresponding author will be forwarded by the Journal Manager to the corresponding author, who must follow the procedure as described above. Note that: (1) Journal Managers will inform the Journal Editors of any such requests and (2) publication of the accepted manuscript in an online issue is suspended until authorship has been agreed.

*After the accepted manuscript is published in an online issue:* Any requests to add, delete, or rearrange author names in an article published in an online issue will follow the same policies as noted above and result in a corrigendum.

## Article transfer service

This journal is part of our Article Transfer Service. This means that if the Editor feels your article is more suitable in one of our other participating journals, then you may be asked to consider transferring the article to one of those. If you agree, your article will be transferred automatically on your behalf with no need to reformat. Please note that your article will be reviewed again by the new journal. More information about this can be found here: <http://www.elsevier.com/authors/article-transfer-service>.

## Copyright

This journal offers authors a choice in publishing their research: Open access and Subscription.

### *For subscription articles*

Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (for more information on this and copyright, see <http://www.elsevier.com/copyright>). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement.

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations (please consult <http://www.elsevier.com/permissions>). If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by authors in these cases: please consult <http://www.elsevier.com/permissions>.

### *For open access articles*

Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' (for more information see <http://www.elsevier.com/OAauthoragreement>). Permitted reuse of open access articles is determined by the author's choice of user license (see <http://www.elsevier.com/openaccesslicenses>).

## Retained author rights

As an author you (or your employer or institution) retain certain rights. For more information on author rights for:

Subscription articles please see <http://www.elsevier.com/journal-authors/author-rights-and-responsibilities>.

Open access articles please see <http://www.elsevier.com/OAauthoragreement>.

## Role of the funding source

You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated.

## Funding body agreements and policies

Elsevier has established agreements and developed policies to allow authors whose articles appear in journals published by Elsevier, to comply with potential manuscript archiving requirements as specified as conditions of their grant awards. To learn more about existing agreements and policies please visit <http://www.elsevier.com/fundingbodies>.

## Open access

This journal offers authors a choice in publishing their research:

### **Open access**

- Articles are freely available to both subscribers and the wider public with permitted reuse
- An open access publication fee is payable by authors or their research funder

### **Subscription**

- Articles are made available to subscribers as well as developing countries and patient groups through our access programs (<http://www.elsevier.com/access>)
- No open access publication fee

All articles published open access will be immediately and permanently free for everyone to read and download. Permitted reuse is defined by your choice of one of the following Creative Commons user licenses:

**Creative Commons Attribution (CC BY):** lets others distribute and copy the article, to create extracts, abstracts, and other revised versions, adaptations or derivative works of or from an article (such as a translation), to include in a collective work (such as an anthology), to text or data mine the article, even for commercial purposes, as long as they credit the author(s), do not represent the author as endorsing their adaptation of the article, and do not modify the article in such a way as to damage the author's honor or reputation.

**Creative Commons Attribution-NonCommercial-ShareAlike (CC BY-NC-SA):** for non-commercial purposes, lets others distribute and copy the article, to create extracts, abstracts and other revised versions, adaptations or derivative works of or from an article (such as a translation), to include in a collective work (such as an anthology), to text and data mine the article, as long as they credit the author(s), do not represent the author as endorsing their adaptation of the article, do not modify the article in such a way as to damage the author's honor or reputation, and license their new adaptations or creations under identical terms (CC BY-NC-SA).

**Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND):** for non-commercial purposes, lets others distribute and copy the article, and to include in a collective work (such as an anthology), as long as they credit the author(s) and provided they do not alter or modify the article.

To provide open access, this journal has a publication fee which needs to be met by the authors or their research funders for each article published open access.

Your publication choice will have no effect on the peer review process or acceptance of submitted articles.

The open access publication fee for this journal is **\$1800**, excluding taxes. Learn more about Elsevier's pricing policy: <http://www.elsevier.com/openaccesspricing>.

#### *Language and language services*

Please write your text in good English (American or British usage is accepted, but not a mixture of the two). Authors who require information about language editing and copyediting services pre- and post-submission please visit <http://webshop.elsevier.com/languageediting> or our customer support site at <http://support.elsevier.com> for more information. A submitted paper that lacks clarity in its use of English will be rejected without being sent for review.

#### **Submission**

Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word, LaTeX) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail.

#### **Submit your article**

Please submit your article via <http://ees.elsevier.com/ijpe> .

### **PREPARATION**

#### **NEW SUBMISSIONS**

Submission to this journal proceeds totally online and you will be guided stepwise through the creation and uploading of your files. The system automatically converts your files to a single PDF file, which is used in the peer-review process.

As part of the Your Paper Your Way service, you may choose to submit your manuscript as a single file to be used in the refereeing process. This can be a PDF file or a Word document, in any format or layout that can be used by referees to evaluate your manuscript. It should contain high enough quality figures for refereeing. If you prefer to do so, you may still provide all or some of the source files at the initial submission. Please note that individual figure files larger than 10 MB must be uploaded separately.

#### **References**

There are no strict requirements on reference formatting at submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/book title, chapter title/article title, year of publication, volume number/book chapter and the pagination



must be present. Use of DOI is highly encouraged. The reference style used by the journal will be applied to the accepted article by Elsevier at the proof stage. Note that missing data will be highlighted at proof stage for the author to correct.

#### *Formatting requirements*

There are no strict formatting requirements but all manuscripts must contain the essential elements needed to convey your manuscript, for example Abstract, Keywords, Introduction, Materials and Methods, Results, Conclusions, Artwork and Tables with Captions.

If your article includes any Videos and/or other Supplementary material, this should be included in your initial submission for peer review purposes.

Divide the article into clearly defined sections. Please ensure the text of your paper is double-spaced—this is an essential peer review requirement.

#### *Figures and tables embedded in text*

Please ensure the figures and the tables included in the single file are placed next to the relevant text in the manuscript, rather than at the bottom or the top of the file.

### **REVISED SUBMISSIONS**

#### *Use of word processing software*

Regardless of the file format of the original submission, at revision you must provide us with an editable file of the entire article. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier: <http://www.elsevier.com/guidepublication>). See also the section on Electronic artwork.

To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

#### *Article structure*

The first page of the manuscript should contain the following information: (i) the title and; (ii) the name(s) and institutional affiliation(s) of the author(s). Footnotes on the same sheet should give the name, address, and telephone and fax numbers of the corresponding author [as well as an e-mail address], and email addresses of all other authors.

Manuscripts should normally not exceed 15 printed journal pages (around 10,000 words). Specific types of papers, such as review papers, may be permitted to exceed this limit. In cases when lengthy derivations or other data taking much space are included for instance in an Appendix, it is advisable to keep this material available in a local research report, etc, and refer to this local document instead of including it in the text. However, the document needs to be made available on request, and it should be uploaded with the main text as a separate file.

#### *Subdivision - numbered sections*

Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

Sections should be numbered using Arabic numerals.

#### *Introduction*

State the objectives of the work and provide an adequate background. All submitted papers should highlight the relevance of the work to the advancement of theory and/or practice.

#### *Theory/calculation*

A Theory section should extend, not repeat, the background to the article already dealt with in the Introduction and lay the foundation for further work. In contrast, a Calculation section represents a practical development from a theoretical basis. Where results from computational and/or simulation experimentation are presented, the experimental conditions should be clearly highlighted; where results are compared with previously published studies, the basis for comparisons should be clear.

#### *Results*

Results should be clear and concise.

### *Discussion*

This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature. The relevance of the results, findings or insights to both theory and practice should be highlighted.

### *Conclusions*

The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

### *Appendices*

If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

### *Essential title page information*

- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name, and the e-mail address of each author.
- **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing, publication and post-publication. **Ensure that telephone 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.**
- **Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a "Present address" (or "Permanent address") may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

Contact details must be kept updated by the corresponding author in the EES system.

### *Abstract*

A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. The abstract should not exceed 250 words. It is uploaded separately in EES, but should also be included in the Main manuscript. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

### **Highlights**

Highlights are mandatory for this journal. They consist of a short collection of bullet points that convey the core findings of the article and should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point). See <http://www.elsevier.com/highlights> for examples.

### *Highlights*

Highlights are a short collection of bullet points that convey the core findings of the article. Highlights should be submitted in a separate file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters per bullet point including spaces). See <http://www.elsevier.com/highlights> for examples.

### *Keywords*

Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and 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. The Keywords are uploaded separately in EES, but should also appear in the Main manuscript.



Abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.

Because of the international character of the journal, no rigid rules concerning notation or abbreviation need to be observed by the authors but each paper should be self-consistent as to symbols and units which should be properly defined. When using a full stop (period) in an abbreviation, the full stop indicates letters omitted. A full stop should not be used if the abbreviation ends with the same letter as the original word. "Volume" may be abbreviated "Vol.", "section" may be abbreviated "sec.", etc., but "Doctor" should be abbreviated "Dr" without an ending full stop and "Editors" by "Eds".

#### *Acknowledgements*

Collate acknowledgements in a separate section at the end of the article before the references do not include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

#### *Mathematical formulae*

Present simple formulae in the line of normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. Powers of e are often more conveniently denoted by exp. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text). Please check earlier articles of IJPE for standard mathematical formulae.

The formulae should be numbered consecutively throughout the manuscript as (1), (2), etc. against the right-hand margin of the page. In cases where the derivation of formulae has been abbreviated, it is of great help to the referees if the full derivation can be presented on a separate sheet (not to be published but uploaded as a separate file).

#### **Footnotes**

Footnotes should be used sparingly. Number them consecutively throughout the article. Many word processors build footnotes into the text, and this feature may be used. Should this not be the case, indicate the position of footnotes in the text and present the footnotes themselves separately at the end of the article.

#### **Artwork**

##### *Electronic artwork*

##### *General points*

- Make sure you use uniform lettering and sizing of your original artwork.
  - Preferred fonts: Arial (or Helvetica), Times New Roman (or Times), Symbol, Courier.
  - Number the illustrations according to their sequence in the text.
  - Use a logical naming convention for your artwork files.
  - Indicate per figure if it is a single, 1.5 or 2-column fitting image.
  - For Word submissions only, you may still provide figures and their captions, and tables within a single file at the revision stage.
  - Please note that individual figure files larger than 10 MB must be provided in separate source files.
- A detailed guide on electronic artwork is available on our website:

<http://www.elsevier.com/artworkinstructions>.

**You are urged to visit this site; some excerpts from the detailed information are given here.**

##### *Formats*

Regardless of the application used, when your electronic artwork is finalized, please 'save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):

EPS (or PDF): Vector drawings. Embed the font or save the text as 'graphics'.

TIFF (or JPG): Color or grayscale photographs (halftones): always use a minimum of 300 dpi.

TIFF (or JPG): Bitmapped line drawings: use a minimum of 1000 dpi.

TIFF (or JPG): Combinations bitmapped line/half-tone (color or grayscale): a minimum of 500 dpi is required.

##### **Please do not:**

- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); the resolution is too low.
- Supply files that are too low in resolution.
- Submit graphics that are disproportionately large for the content.

### *Color artwork*

Please make sure that artwork files are in an acceptable format (TIFF (or JPEG), EPS (or PDF), or MS Office files) and with the correct resolution. If, together with your accepted article, you submit usable color figures then Elsevier will ensure, at no additional charge, that these figures will appear in color online (e.g., ScienceDirect and other sites) regardless of whether or not these illustrations are reproduced in color in the printed version. **For color reproduction in print, you will receive information regarding the costs from Elsevier after receipt of your accepted article.** Please indicate your preference for color: in print or online only. For further information on the preparation of electronic artwork, please see <http://www.elsevier.com/artworkinstructions>.

Please note: Because of technical complications that can arise by converting color figures to 'gray scale' (for the printed version should you not opt for color in print) please submit in addition usable black and white versions of all the color illustrations.

### *Figure captions*

Ensure that each illustration has a caption. A caption should comprise a brief title (**not** on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used.

### **Tables**

Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules.

Figures and Tables should be numbered with Arabic numerals. Captions should be placed under the figure or table. There is no longer a requirement to upload figures and tables as separate files: please insert each in the relevant place in the main document.

### **References**

Please check carefully that reference to relevant recent *IJPE* articles is made. A lack of references to *IJPE* may indicate that this journal is not the most suitable outlet for your research.

### *Citation in text*

Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either "Unpublished results" or "Personal communication" Citation of a reference as "in press" implies that the item has been unconditionally accepted for publication.

### *Reference links*

Increased discoverability of research and high quality peer review are ensured by online links to the sources cited. In order to allow us to create links to abstracting and indexing services, such as Scopus, CrossRef and PubMed, please ensure that data provided in the references are correct. Please note that incorrect surnames, journal/book titles, publication year and pagination may prevent link creation. When copying references, please be careful as they may already contain errors. Use of the DOI is encouraged.

### *Web references*

As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

### *References in a special issue*

Please ensure that the words 'this issue' are added to any references to other articles in the same Special Issue. This should be both in the main text and reference list.

### *Reference management software*

This journal has standard templates available in key reference management packages EndNote (<http://www.endnote.com/support/enstyles.asp>) and Reference Manager (<http://refman.com/support/rmstyles.asp>). Using plug-ins to wordprocessing packages, authors only need to select the appropriate journal template when preparing their article and the list of references and citations to these will be formatted according to the journal style which is described below.

### *Reference formatting*

There are no strict requirements on reference formatting at submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/book title, chapter title/article title, year of publication, volume number/book chapter and the pagination must be present. Use of DOI is highly encouraged. The reference style used by the journal will be applied to the accepted article by Elsevier at the proof stage. Note that missing data will be highlighted at proof stage for the author to correct. If you do wish to format the references yourself they should be arranged according to the following examples:

### *Reference style*

Citations in the text should be of the form, "Tu & Cheng (1998)" or "(Tu & Cheng, 1998)" or "(Tu & Cheng 1998)", etc. References should not be numbered in the text or in the reference list. References should be in the following style (alphabetical order with respect to last name):

Inderfurth, K., 2007. How to protect against demand and yield risks in MRP systems. *International Journal of Production Economics*, 121(2), 2009, 474-481.

Karp, R.M., 1992. Reducibility among combinatorial problems. In: Miller, R.E., Thatcher, J.W., (Eds.). *Complexity of computer computations*. New York: Plenum Press, 85-103.

Magazine, M., 1969. Optimal policies for queuing systems with periodic review. Dissertation, University of Florida, USA.

Tu, C.-C., Cheng, H., 1998. Spectral methods for graph bisection problems. *Computers and Operations Research*, 25 (7-8), 519-30.

Note that journal titles should not be abbreviated.

### **Video data**

Elsevier accepts video material and animation sequences to support and enhance your scientific research. Authors who have video or animation files that they wish to submit with their article are strongly encouraged to include links to these within the body of the article. This can be done in the same way as a figure or table by referring to the video or animation content and noting in the body text where it should be placed. All submitted files should be properly labeled so that they directly relate to the video file's content. In order to ensure that your video or animation material is directly usable, please provide the files in one of our recommended file formats with a preferred maximum size of 50 MB. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect: <http://www.sciencedirect.com>. Please supply 'stills' with your files: you can choose any frame from the video or animation or make a separate image. These will be used instead of standard icons and will personalize the link to your video data. For more detailed instructions please visit our video instruction pages at <http://www.elsevier.com/artworkinstructions>. Note: since video and animation cannot be embedded in the print version of the journal, please provide text for both the electronic and the print version for the portions of the article that refer to this content.

### **AudioSlides**

The journal encourages authors to create an AudioSlides presentation with their published article. AudioSlides are brief, webinar-style presentations that are shown next to the online article on ScienceDirect. This gives authors the opportunity to summarize their research in their own words and to help readers understand what the paper is about. More information and examples are available at <http://www.elsevier.com/audioslides>. Authors of this journal will automatically receive an invitation e-mail to create an AudioSlides presentation after acceptance of their paper.

### **Supplementary data**

Elsevier accepts electronic supplementary material to support and enhance your scientific research. Supplementary files offer the author additional possibilities to publish supporting applications, high-resolution images, background datasets, sound clips and more. Supplementary files supplied will be published online alongside the electronic version of your article in Elsevier Web products, including ScienceDirect: <http://www.sciencedirect.com>. In order to ensure that your submitted material is directly usable, please provide the data in one of our recommended file formats. Authors should

submit the material in electronic format together with the article and supply a concise and descriptive caption for each file. For more detailed instructions please visit our artwork instruction pages at <http://www.elsevier.com/artworkinstructions>.

### **Submission checklist**

The following list will be useful during the final checking of an article prior to sending it to the journal for review. Please consult this Guide for Authors for further details of any item.

#### **Ensure that the following items are present:**

One author has been designated as the corresponding author with contact details:

- E-mail address
- Full postal address
- Telephone

All necessary files have been uploaded, and contain:

- Keywords
- All figure captions
- All tables (including title, description, footnotes)

Further considerations

- Manuscript has been 'spell-checked' and 'grammar-checked'
- All references mentioned in the Reference list are cited in the text, and vice versa
- Permission has been obtained for use of copyrighted material from other sources (including the Internet)

Printed version of figures (if applicable) in color or black-and-white

- Indicate clearly whether or not color or black-and-white in print is required.
- For reproduction in black-and-white, please supply black-and-white versions of the figures for printing purposes.

For any further information please visit our customer support site at <http://support.elsevier.com>.

## **AFTER ACCEPTANCE**

### **Use of the Digital Object Identifier**

The Digital Object Identifier (DOI) may be used to cite and link to electronic documents. The DOI consists of a unique alpha-numeric character string which is assigned to a document by the publisher upon the initial electronic publication. The assigned DOI never changes. Therefore, it is an ideal medium for citing a document, particularly 'Articles in press' because they have not yet received their full bibliographic information. Example of a correctly given DOI (in URL format; here an article in the journal *Physics Letters B*):

<http://dx.doi.org/10.1016/j.physletb.2010.09.059>

When you use a DOI to create links to documents on the web, the DOIs are guaranteed never to change.

#### *Proofs*

One set of page proofs (as PDF files) will be sent by e-mail to the corresponding author or, a link will be provided in the e-mail so that authors can download the files themselves. Elsevier now provides authors with PDF proofs which can be annotated; for this you will need to download Adobe Reader version 7 (or higher) available free from <http://get.adobe.com/reader>. Instructions on how to annotate PDF files will accompany the proofs (also given online). The exact system requirements are given at the Adobe site: <http://www.adobe.com/products/reader/systemreqs>.

If you do not wish to use the PDF annotations function, you may list the corrections (including replies to the Query Form) and return them to Elsevier in an e-mail. Please list your corrections quoting line number. If, for any reason, this is not possible, then mark the corrections and any other comments (including replies to the Query Form) on a printout of your proof and return by fax, or scan the pages and e-mail, or by post. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. We will do everything possible to get your article published quickly and accurately. Therefore, it is important to ensure that all of your corrections are sent back to us in one communication: please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility. Note that Elsevier may proceed with the publication of your article if no response is received.

### **Online proof correction**

Corresponding authors will receive an e-mail with a link to our online proofing system, allowing annotation and correction of proofs online. The environment is similar to MS Word: in addition to editing text, you can also comment on figures/tables and answer questions from the Copy Editor. Web-based proofing provides a faster and less error-prone process by allowing you to directly type your corrections, eliminating the potential introduction of errors.

If preferred, you can still choose to annotate and upload your edits on the PDF version. All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF.

We will do everything possible to get your article published quickly and accurately. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. It is important to ensure that all corrections are sent back to us in one communication. Please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

### **Offprints**

The corresponding author, at no cost, will be provided with a personalized link providing 50 days free access to the final published version of the article on [ScienceDirect](#). This link can also be used for sharing via email and social networks. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via Elsevier's WebShop (<http://webshop.elsevier.com/myarticleservices/offprints>). Authors requiring printed copies of multiple articles may use Elsevier WebShop's 'Create Your Own Book' service to collate multiple articles within a single cover (<http://webshop.elsevier.com/myarticleservices/booklets>).

### **AUTHOR INQUIRIES**

For inquiries relating to the submission of articles (including electronic submission where available) please visit this journal's homepage. Also accessible from here is information on copyright, frequently asked questions and more. Contact details for questions arising after acceptance of an article, especially those relating to proofs, will be provided by the publisher. You can track accepted articles at <http://www.elsevier.com/trackarticle> and set up e-mail alerts to inform you of when an article's status has changed.

© Copyright 2014 Elsevier | <http://www.elsevier.com>