



### TABLE OF CONTENTS

●	<b>Description</b>	<b>p.1</b>
●	<b>Impact Factor</b>	<b>p.2</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.3</b>



ISSN: 0733-5210

### DESCRIPTION

The *Journal of Cereal Science* was established in 1983 to provide an International forum for the publication of original research papers of high standing covering all aspects of **cereal science** related to the functional and nutritional quality of **cereal grains** and their products.

The journal also publishes concise and critical review articles appraising the status and future directions of specific areas of cereal science and short rapid communications that present news of important advances in research. The journal aims at topicality and at providing comprehensive coverage of progress in the field.

Papers [submitted](#) to *Journal of Cereal Science* should not be purely descriptive or confirmatory in nature, but should be innovative and offer new insights into cereal science research.

Research Areas Include:

- **Composition** and analysis of cereal grains in relation to **quality** in end use
- Morphology, biochemistry, and biophysics of cereal grains relevant to **functional** and **nutritional characteristics**
- Structure and physicochemical properties of functionally and nutritionally important **components** of cereal grains such as polysaccharides, proteins, oils, enzymes, vitamins, and minerals
- **Storage** of cereal grains and derivatives and effects on nutritional and functional quality
- Genetics, agronomy, and pathology of **cereal crops** if there is a substantive relationship to end-use properties of cereal grains
- Functional and nutritional aspects of **cereal-based foods** and **beverages**, whether baked, fermented, or extruded
- **Industrial products** (e.g., starch derivatives, syrups, protein concentrates, and isolates) from cereal grains, and their technology
- **functional genomics** as it relates to end-use quality.

Database coverage includes AGRICOLA, Biological Abstracts (BIOSIS), Chemical Abstracts, Current Contents, Food Science and Technology Abstracts, Maize Abstracts, Research Abstracts, and Science Citation Index.

### 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>

## IMPACT FACTOR

---

2013: 1.943 © Thomson Reuters Journal Citation Reports 2014

## ABSTRACTING AND INDEXING

---

AGRICOLA  
Chemical Abstracts  
Current Contents  
FSTA (Food Science and Technology Abstracts)  
Science Citation Index  
Biological Abstracts  
Scopus  
EMBiology

## EDITORIAL BOARD

---

### *Editor-in-Chief*

**F. MacRitchie**

### *Editors*

**G.M. Campbell**, University of Huddersfield, Huddersfield, England, UK

**D. Lafiandra**, Università degli Studi della Tuscia, Viterbo, Italy

**C.M. Rosell**, Institute of Agrochemistry and Food Technology, Paterna, Valencia, Spain

**J.R.N. Taylor**, University of Pretoria, Pretoria, South Africa

### *Review Editor*

**P.R. Shewry**, IACR-Rothamsted Experimental Station, Harpenden, UK

### *Editorial Board Members*

**S. Bean**, U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), MANHATTAN, Kansas, USA

**L.A. Bello-Perez**, Instituto Politécnico Nacional, Morelos, Mexico

**A. Blechl**, U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Albany, California, USA

**L. Cattivelli**, CRA Genomics Research Centre, Fiorenzuola d'Arda, Italy

**P. Colonna**, Institut Nationale de la Recherche Agronomique (INRA), Nantes, France

**H. Corke**, The University of Hong Kong, Hong Kong, China

**R. D'Ovidio**, Università degli Studi della Tuscia, Viterbo, Italy

**S.R. Delwiche**, ARS USDA, Beltsville, Maryland, USA

**Z. He**, International Maize and Wheat Improvement Center, Beijing, China

**B.O. Juliano**, Philippines Rice Research Institute, Laguna, Philippines

**J. Kokini**, Purdue University, West Lafayette, Indiana, USA

**O.R. Larroque**, CSIRO (The Commonwealth Scientific and Industrial Research Organization), Canberra, Australia

**M-H. Morel**, INRA Centre de Montpellier, Montpellier, France

**K. Poutanen**, VTT Technical Research Centre of Finland, Finland

**S. Serna Saldívar**, ITESM, Monterrey, Mexico

**B.O. Svensson**, Danmarks Tekniske Universitet (DTU), Kgs Lyngby, Denmark

**K. Trafford**, National Institute of Agricultural Botany, Cambridge, England, UK

### *Founding Editors*

**T. Galliard**

**J.D. Schofield**

## GUIDE FOR AUTHORS

---

### INTRODUCTION

The *Journal of Cereal Science* was established in 1983 to provide an International forum for the publication of original research papers of high standing covering all aspects of cereal science related to the functional and nutritional quality of cereal grains and their products. The journal also publishes concise and critical review articles appraising the status and future directions of specific areas of cereal science and short rapid communications that present news of important advances in research. The journal aims at topicality and at providing comprehensive coverage of progress in the field. Papers submitted to *Journal of Cereal Science* should not be purely descriptive or confirmatory in nature, but should be innovative and offer new insights into cereal science research.

Research Areas Include:

Composition and analysis of cereal grains in relation to quality in end use Morphology, biochemistry, and biophysics of cereal grains relevant to functional and nutritional characteristics Structure and physicochemical properties of functionally and nutritionally important components of cereal grains such as polysaccharides, proteins, oils, enzymes, vitamins, and minerals Storage of cereal grains and derivatives and effects on nutritional and functional quality Genetics, agronomy, and pathology of cereal crops if there is a substantive relationship to end-use properties of cereal grains Functional and nutritional aspects of cereal-based foods and beverages, whether baked, fermented, or extruded Industrial products (e.g., starch derivatives, syrups, protein concentrates, and isolates) from cereal grains, and their technology functional genomics as it relates to end-use quality.

The *Journal of Cereal Science* publishes papers originating in any country. Papers dealing with topics of only restricted local interest will not be accepted, however, unless the information presented can be demonstrated to be of general applicability.

The Journal exists to advance scientific concepts in cereal science, and the content of papers published within it must be consistent with this goal.

### **Types of paper**

Research papers:

The main activity of the Journal in fulfilling its mission is the publication of original and innovative research papers of a high scientific standard. These papers should: (a) report a specific identifiable advance in knowledge that has not been published elsewhere; (b) claim no more than can be substantiated by the results; (c) be logically consistent both within themselves and within the existing body of knowledge; (d) give enough information to allow the research to be tested and repeated by competent researchers elsewhere; and (e) give due reference to previously published work relevant to the research described. Papers must contain a maximum of 6000 words of text, no more than six tables or figures and up to 30 references. The second page of the manuscript should contain the Abstract only. The text should then follow the sequence: Introduction, Experimental, Results, Discussion, Acknowledgements, References, Tables, Figure Captions and, finally, Figures. Please number the pages, and each section should also be numbered.

Reviews:

These should present critical appraisals of the current status and future directions of specific areas of topical interest. They are not intended as exhaustive, archival literature surveys over a broad front. They should aim to give balanced, objective assessments by giving due reference to relevant published work and not merely represent the prejudices of individual authors or summarise only work carried out by the authors or by those with whom the authors agree. They should also avoid undue speculation.

Updates:

These are brief reviews of recent progress, focusing on the application of novel approaches and technologies. They will be limited to four printed pages in the journal (equivalent of approx. 4000 words) in total ( i.e. including title, references, tables and figures, etc). Where figures or tables are used, the number of words must be reduced to compensate for these and need not be divided into the usual sections. Unsolicited *Updates* will not be accepted and scientists wishing to contribute *Updates* should initially correspond with the Reviews Editor (Prof. P.R. Shewry, peter.shewry@bbsrc.ac.uk).

#### Research notes:

These are intended as a means of publishing the results of studies of limited size that do not merit high-priority treatment.

#### Rapid communications:

These are intended as vehicles for conveying news of advances in cereal science, the scientific importance of which merits preferential treatment. Scientific importance and novelty of the information will be the key criteria in judging their acceptability.

The format for Rapid Communications and Research Notes is flexible. No Abstract is required, and there is no specification as to number of tables, figures or references. The paper should not be split into sections, although it should begin with a few sentences to introduce the subject area and to indicate the nature of the problem being examined. Likewise, at the end of the paper the conclusions drawn from the work should be summarised.

Rapid Communications and Research Notes will be strictly limited to two printed pages in the journal (equivalent of approx. 2000 words) in total, i.e. including title, references, tables and figures, etc. Where figures or tables are used, the number of words must be reduced to compensate for these, giving due regard to the size of such tables and figures. Other details on preparation are as for conventional research papers.

Letters to the Editor concerned with issues raised by articles recently published in the journal or by recent developments in cereal science are welcomed. These may be submitted informally to the Editor at any time. Letters should not exceed 750 words.

#### Book reviews:

Please contact the Editor-in-Chief if you wish to submit a book review.

#### *Review System*

Papers are peer-reviewed by independent reviewers with appropriate expertise in the subject area of the paper. The review process is anonymous, although the reviewers' recommendations and comments are usually transmitted to the authors to help them in revising their manuscripts (which is almost invariably required). The Editors and reviewers attempt to make the review system as constructive and sympathetic as possible, although they must, at the same time, attempt to ensure that only papers of a high standard are published. Many contributors acknowledge the help they receive from the review process in improving their papers. No revision of Rapid Communications will be allowed in order to ensure rapid publication.

As well as advising on the paper's acceptability, the reviewers are also asked to give a priority rating, which will help to give the highest priority to papers that represent important new advances. Papers recommended for publication will be categorised as: (a) being of outstanding scientific standard and representing an important advance in the particular subject area; (b) being of high scientific standard but representing a logical or predictable extension of previous research; (c) presenting necessary information and of good scientific standard but being essentially confirmatory in nature.

**Please note:** authors may suggest the name of appropriate reviewers for their papers or may identify individual reviewers whom they would prefer not to review the manuscript; provided that valid reasons are given in the latter case the Editors will respect the author's wishes.

#### *Resubmission of Revised Manuscripts*

If a manuscript returned to the author for revision is not resubmitted within 6 weeks (making due allowance for postage times), it may on re-submission be deemed a new paper and the date of receipt altered accordingly.

#### *Preparation of Manuscripts*

The standard of preparation of the manuscript determines to a considerable extent the speed of processing and publication. Authors are advised in their own interests to read these notes carefully and to ensure that their manuscript meets the requirements; they are also urged to ensure that the manuscript does not contain superfluous material.

### **Contact details for submission**

Submission for all types of manuscripts to *Journal of Cereal Science* proceeds totally online. Via the Elsevier Editorial System website for this journal, <http://ees.elsevier.com/yjcrs> you will be guided step-by-step through the creation and uploading of the various files.

### **BEFORE YOU BEGIN**

#### **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).

#### **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/sharingolicity>), 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.

#### **Copyright**

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 third party reuse of open access articles is determined by the author's choice of user license (see <http://www.elsevier.com/openaccesslicenses>).

### **Author rights**

As an author you (or your employer or institution) have certain rights to reuse your work. For more information see <http://www.elsevier.com/copyright>.

### **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 a number of agreements with funding bodies which allow authors to comply with their funder's open access policies. Some authors may also be reimbursed for associated publication fees. To learn more about existing agreements 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 on their behalf e.g. by their research funder or institution

#### **Subscription**

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

Regardless of how you choose to publish your article, the journal will apply the same peer review criteria and acceptance standards.

For open access articles, permitted third party (re)use is defined by the following Creative Commons user licenses:

#### *Creative Commons Attribution (CC BY)*

Lets others distribute and copy the article, create extracts, abstracts, and other revised versions, adaptations or derivative works of or from an article (such as a translation), include in a collective work (such as an anthology), 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-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.

The open access publication fee for this journal is **USD 3000**, excluding taxes. Learn more about Elsevier's pricing policy: <http://www.elsevier.com/openaccesspricing>.

### **Language (usage and editing services)**

Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's WebShop (<http://webshop.elsevier.com/languageediting/>) or visit our customer support site (<http://support.elsevier.com>) for more information.

## 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.

Authors must provide and use an email address unique to themselves and not shared with another author registered in EES, or a department.

## PREPARATION

### Use of word processing software

It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. 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>). Note that source files of figures, tables and text graphics will be required whether or not you embed your figures in the text. 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.

Pages must be numbered, and lines should be numbered consecutively throughout the manuscript.

### Article structure

#### 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.

#### Introduction

State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

#### Material and methods

Provide sufficient detail to allow the work to be reproduced. Methods already published should be indicated by a reference: only relevant modifications should be described.

#### 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.

#### 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, if available, the e-mail address of each author.

• **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. **Ensure that the e-mail address is given and that contact details are 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.

### **Abstract**

A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. 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.

### **Keywords**

To assist in the preparation of a key word index, authors should provide a list of up to four key words on the title page of the manuscript

### **Chemical compounds**

You can enrich your article by providing a list of chemical compounds studied in the article. The list of compounds will be used to extract relevant information from the NCBI PubChem Compound database and display it next to the online version of the article on ScienceDirect. You can include up to 10 names of chemical compounds in the article. For each compound, please provide the PubChem CID of the most relevant record as in the following example: Glutamic acid (PubChem CID:611). The PubChem CIDs can be found via <http://www.ncbi.nlm.nih.gov/pccompound>. Please position the list of compounds immediately below the 'Keywords' section. It is strongly recommended to follow the exact text formatting as in the example below:

Chemical compounds studied in this article

Ethylene glycol (PubChem CID: 174); Plitidepsin (PubChem CID: 44152164); Benzalkonium chloride (PubChem CID: 15865)

More information is available at: <http://www.elsevier.com/PubChem>.

### **Abbreviations**

Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such 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.

### **Acknowledgements**

Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, 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.).

### **Nomenclature and units**

Abbreviations and symbols should, wherever possible, follow the IUBMB recommendations on Biochemical and Organic Nomenclature, Symbols and Terminology, at <http://www.chem.qmul.ac.uk/iubmb/>.



Non-standard abbreviations should be kept to a minimum. The words to be abbreviated should be spelled out in full on the first citation and the abbreviation given in parentheses. All abbreviations used should be listed and their meanings given on the title page (this list will be included on the front page of the published article). Enzyme nomenclature should follow the IUBMB Enzyme Commission recommendations ( <http://www.chem.qmul.ac.uk/enzyme/>) (relevant EC numbers should be given).

The International System of units (SI) should be followed (see "Quantities, Units and Symbols in Physical Chemistry", Mills, Ian; Cvitas, Tomislav; Homann, Klaus; Kallay, Nikola; Kuchitsu, Kozo, C R C Press Blackwell Science (UK), ISBN: 0632035838, 1995, or "Specification for quantities, units and symbols. Physical chemistry and molecular physics" BS 5775-8:1993 ISO 31-8:1992, ISBN: 0580221954, 1993). You may also wish to consult the website of the Bureau International des Poids et Mesures, <http://www1.bipm.org/en/si>.

Non-standard, but conventional, units may be accepted if unambiguous and where there is no SI unit. Non-standard, but conventional, units may be accepted if unambiguous and where there is no SI unit.

### **Database linking**

Elsevier encourages authors to connect articles with external databases, giving their readers one-click access to relevant databases that help to build a better understanding of the described research. Please refer to relevant database identifiers using the following format in your article: Database: xxxx (e.g., TAIR: AT1G01020; CCDC: 734053; PDB: 1XFN). See <http://www.elsevier.com/databaselinking> for more information and a full list of supported databases.

### **Math formulae**

Please submit math equations as editable text and not as images. Present simple formulae in line with normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. In principle, variables are to be presented in italics. 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).

### **Footnotes**

Footnotes should be used sparingly. Number them consecutively throughout the article. Many word processors can build footnotes into the text, and this feature may be used. Otherwise, please indicate the position of footnotes in the text and list the footnotes themselves separately at the end of the article. Do not include footnotes in the Reference list.

### **Artwork**

#### *Electronic artwork*

#### *General points*

- Make sure you use uniform lettering and sizing of your original artwork.
- Embed the used fonts if the application provides that option.
- Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
- Provide captions to illustrations separately.
- Size the illustrations close to the desired dimensions of the published version.
- Submit each illustration as a separate file.

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*

If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is' in the native document format.

Regardless of the application used other than Microsoft Office, 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 all used fonts.

TIFF (or JPEG): Color or grayscale photographs (halftones), keep to a minimum of 300 dpi.

TIFF (or JPEG): Bitmapped (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.

TIFF (or JPEG): Combinations bitmapped line/half-tone (color or grayscale), keep to a minimum of 500 dpi.

### **Please do not:**

- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); these typically have a low number of pixels and limited set of colors;
- 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. Supply captions separately, not attached to the figure. 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.

### **References**

#### *Citation in text*

Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. 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 accepted for publication.

#### *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 in the list (and any citations in the text) to other articles in the same Special Issue.

#### *Reference style*

Reference Text: All citations in the text should refer to:

1. Single author: the author's name (without initials, unless there is ambiguity) and the year of publication;
2. Two authors: both authors' names and the year of publication;
3. Three or more authors: first author's name followed by 'et al.' and the year of publication.

Citations may be made directly (or parenthetically). Groups of references should be listed first alphabetically, then chronologically.

Examples: "as demonstrated (Allan, 1996a, 1996b, 1999; Allan and Jones, 1995). Kramer et al. (2000) have recently shown ...."

List: References should be arranged first alphabetically and then further sorted chronologically if necessary. More than one reference from the same author(s) in the same year must be identified by the letters "a", "b", "c", etc., placed after the year of publication. Journal titles should be given in full.

Examples:

Reference to a journal publication:

Cuvelier, G., Launay, B., 1986. Concentration regimes in xanthum gum solutions deduced from flow and viscosity properties. *Carbohydrate Polymers* 6, 321-333.

Reference to a book:

Strunk Jr., W., White, E.B., 1979. *The Elements of Style*, third ed. Macmillan, New York.

Reference to a chapter in an edited book:

Mettam, G.R., Adams, L.B., 1999. How to prepare an electronic version of your article. In: Jones, B.S., Smith, R.Z. (Eds.), *Introduction to the Electronic Age*. E-Publishing Inc., New York, pp. 281-304.

It is important that the references cited should be accessible to the general reader. References to unpublished materials should not appear in the reference list. References to papers 'in press' or in obscure sources should also be avoided, as should references to proceedings of conferences/conference abstracts available only to the conference attendees. References to papers in private publications, e.g. a report appearing in a publication directed to the membership of a private research organisation, must not be used.

*Citing and listing of web references.* As a minimum, the full URL should be given. Any further information, if known (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.

Please ensure that no more than 30 references are included in submitted research papers.

### **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>.

### **Interactive Phylogenetic Trees**

You can enrich your online articles by providing phylogenetic tree data files (optional) in Newick or NeXML format, which will be visualized using the interactive tree viewer embedded within the online article. Using the viewer it will be possible to zoom into certain tree areas, change the tree layout, search within the tree, and collapse/expand tree nodes and branches. Submitted tree files will also be available for downloading from your online article on ScienceDirect. Each tree must be contained in an individual data file before being uploaded separately to the online submission system, via the 'phylogenetic tree data' submission category. Newick files must have the extension .new or .nwk (note that a semicolon is needed to end the tree). Please do not enclose comments in Newick files and also delete any artificial line breaks within the tree data because these will stop the tree from showing. For NeXML, the file extension should be .xml. Please do not enclose comments in the file. Tree data submitted with other file extensions will not be processed. Please make sure that you validate your Newick/NeXML files prior to submission. For more information please see <http://www.elsevier.com/phylogenetictrees>.

### **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

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'
- References are in the correct format for this journal
- 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>.

### **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 and fax numbers

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'
- No more than 30 references uses; References are in the correct format for this journal
- 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 Web)
- Color figures are clearly marked as being intended for color reproduction on the Web (free of charge) and in print, or to be reproduced in color on the Web (free of charge) and in black-and-white in print
- If only color on the Web is required, black-and-white versions of the figures are also supplied for printing purposes

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

#### *Additional information*

##### Research Papers

Papers must contain a maximum of 6000 words of text, no more than six tables or figures and NO MORE THAN 30 references. The second page of the manuscript should contain the Abstract only. The text should then follow the sequence: Introduction, Experimental, Results, Discussion, Acknowledgements, References, Tables, Figure Captions and, finally, Figures. Please number the pages, and each section should also be numbered.

The Abstract should be clear and concise with a maximum of 200 words. When submitting your article, please ensure that the abstract is included in your manuscript text as well as supplying the manuscript online when requested.

##### Reviews

The layout for reviews is flexible, and will be dictated to a large extent by the points that the author is attempting to discuss. An Abstract should be included, however, and the background should be contained in an Introduction. Details on citation and listing of references, preparation of figures and tables, abbreviations and units, etc., are as for conventional research papers.

##### Rapid Communications and Research Notes

The format for these papers is flexible. No Abstract is required, and there is no specification as to number of tables, figures or references. The paper should not be split into sections, although it should begin with a few sentences to introduce the subject area and to indicate the nature of the problem being examined. Likewise, at the end of the paper the conclusions drawn from the work should be summarised.

Rapid Communications and Research Notes will be strictly limited to two printed pages in the journal (equivalent of approx. 2000 words) in total, i.e. including title, references, tables and figures, etc. Where figures or tables are used, the number of words must be reduced to compensate for these, giving due regard to the size of such tables and figures. Other details on preparation are as for conventional research papers.

For Rapid Communications, authors are required to justify in a covering letter why the paper should be accorded priority treatment.

## **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.

### ***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**

You can track your submitted article at [http://help.elsevier.com/app/answers/detail/a\\_id/89/p/8045/](http://help.elsevier.com/app/answers/detail/a_id/89/p/8045/). You can track your accepted article at <http://www.elsevier.com/trackarticle>. You are also welcome to contact Customer Support via <http://support.elsevier.com>.

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