

GUIDE FOR AUTHORS

The VECTOR journal, as a disclosure medium of knowledge in the global engineering community, makes a cordial invitation to be a contributor in the construction of this project, by sending original manuscripts for their publication. The types of paper that can be published are as follows:

- 1) **Research Paper:** Detailed presentation of the original results of research projects.
- 2) **Review Paper:** A document where the results of published or non-published research works on a field in science or technology are analyzed, systematized and integrated with the purpose of presenting the advances and development trends. It is characterized by presenting a thorough literature review of at least 50 references.
- 3) **Short Communication:** A brief document that presents preliminary, partial or original results of a scientific or technological research, which generally requires a soon disclosure.
- 4) **Case Study:** A document that presents the results of a study on a particular situation, with the purpose of presenting technical and methodological experiences considered in that specific case. It includes a commented systematic literature review on analogous cases.

ARTICLE STRUCTURE

In order to be considered by the Editorial Board as a possible publication in the VECTOR journal, the research papers must be structured in the following way:

- a) **Title of the article.** It must explain the article, be in the Times New Roman font No. 14, bold type and without all caps, with a maximum of 20 words
- b) **Authors' information.** Authors' full name in Times New Roman font No. 12. In the next line, the affiliation of each one of the authors and the address of the institution where they work, starting with the corresponding superscript. In the footnote, symbolized by an asterisk (*), the corresponding author's electronic mail address should be indicated. Optionally, the e-mails of the remaining authors may be linked. Example:

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c) Abstract. An abstract must be included. It must be no longer than 200 words, and consists in a brief and precise presentation of the document, without interpretations, critics, or evaluative judgments, but concerning the methodology, the main results and the conclusions.

d) Keywords. Provide a maximum of 5 keywords to identify the most important aspects of the article. These words must be immediately after the abstract.

e) Introduction. It must describe the general proposal of the study, such as: background, brief state-of-the-art on the specific thematic, and the objectives and scope of the study.

f) Materials and methods. The methodology used during the article study is due to describe in a concise way. The analytical methods that were used, the equipment, the microorganisms, and in general the most important aspects that allow the visualization by the reader of the methodological approach employed, should be presented. In the case of articles which do not correspond to an experimental research, e.g., papers about process modeling or simulation, the approach used must be described. This approach should include information about the numerical methods, algorithms, and software utilized, among other aspects (if they apply). In this case, the section name can be modified.

g) Results and discussion. Here, the authors show in a clear, precise and objective way, the results of the research study using figures (pictures, graphs, diagrams) and tables. Also, the author evaluates his/her findings and determines to what extent he/she has contributed to the solution of the problem described in the introduction. The discussion section can be presented in a separate way. In the experimental articles, it is important to present the statistical assessment of the results obtained.

h) Conclusions. The main conclusions drawn from results should be presented in a short Conclusions section (maximum 200 words).

i) References. It is demanded that references are included at the end of the article, alphabetically ordered, and obeying the following norms:

1) Journal articles

Example: Numminen K., Sipila O., Makisalo H. (2005). Preoperative hepatic 3D models: Virtual liver resection using three-dimensional imaging technique. *European Journal of Radiology*, 56:179-184.

2) Books

Example: Edgar T.F., Himmelbleau D.M., Lasdon L.S. (2001). *Optimization of Chemical Processes*. McGraw-Hill: New York. 651 p.

3) Book sections

Example: Madson P.W., Monceaux D.A. (1995). Fuel ethanol production. In: *The Alcohol Textbook*. Lyons T.P., Kelsall D.R., Murtagh J.E. (Eds.). University Press: Nottingham. pp. 257-268.

4) Reports

Example: Wooley R., Ruth M., Sheehan J., Ibsen K., Majdeski H., Galvez A. (1999). *Lignocellulosic biomass to ethanol process design and economics utilizing co-current dilute acid prehydrolysis and enzymatic hydrolysis*.

Current and futuristic scenarios. Technical Report NREL/TP-580-26157. National Renewable Energy Laboratory: Golden, CO (USA). 123 p. Available in: http://www.senternovem.nl/mmfiles/26454_tcm24-124156.pdf.

5) Ph.D. thesis or M.Sc. works

Example: Li X. (2004). *Conflict-based method for conceptual process synthesis*. Ph.D. Thesis. Department of Chemical Technology, Lappeenranta University of Technology: Lappeenranta, Finland. 79 p.

6) Congresses, symposia, meetings or academic events:

Example: Stadherr M.A. (1997). Large-scale process simulation and optimization in a high performance computing environment. In: *Aspen World 97*. Boston, MA, USA.

7) Websites

Example 1: ETPI. (2003). *The sugar sector environmental report*. Environmental Technology Program for Industry (ETPI). Available in: <http://www.cpp.org.pk/etpirpt/SugarSectorReport.pdf>. [Visited in July 2006].

Example 2: Berg C. (2004). *World Fuel Ethanol Analysis and Outlook*. Murtagh & Associates. Available in: <http://www.distill.com/World-Fuel-Ethanol-A&O-2004.html>. [Visited in November 2007].

8) Patents

Example: Maranhao L.E.C. (1982). *Individual bagasse drier*. United States Patent 4326470.

To handle citations and references, Vector has made available to the authors the EndNote file with the style (template) required by the journal rules. Authors can write an e-mail message requesting the mentioned file to revistavector@ucaldas.edu.co or download it directly from the website of the journal.

ARTICLE PRESENTATION

The maximum length of the article to be published, including figures and tables, should be at the most 15 pages using 1.5 spacing and Times New Roman font No. 12 in one column. The text should be written in MS Word using 2.5 cm margins. Differentiate clearly the beginning of each paragraph indented by three spaces (do not use a blank line to differentiate paragraphs). Numbering of headings and subheadings up to the fourth level (for example, 3.1.2.4) is allowed.

Illustrations, images, charts, photographs, diagrams, flow charts and any type of graphic material should be labeled as figures and must be cited in the text in the next way: Figure 1, Figure 2, etc. Tables should be cited in the text as follows: Table 1, Table 2, etc. This also applies to the titles of tables and figure captions. The headings (captions) for figures should go after them; the titles of the tables should go before them.

All the citations within the text must contain only the first Author's last name (without initials of the second last name or name) followed by a comma and the year of publication of the corresponding reference. When the reference (article, book, book chapter, report, patent, website, presentation on

events, etc.) has two authors, the citation must list the Authors' last names joined by the conjunction "and" followed by a comma and the year of publication. If the reference has three or more authors, the citation must indicate the surname of the first Author followed by the abbreviation "*et al.*" in italic style, a comma, and the year of publication. If different sources are reported by the same author or authors in the same year, add at the end of the year in the citation (and in the reference year) a letter in alphabetical order to differentiate them. If the citation is direct, the author's last name does not go in parentheses, but it does the year. If the citation is indirect, the author's surname and the year of publication must be in parentheses. Several citations are grouped according to the alphabetical order of the authors and then by year.

Examples:

"According to Smith (2003), the representations..."

"Smith and Adams (2006) have reported..."

"Different studies have demonstrated the validity of this approach (Cardenas *et al.*, 2010; Smith, 2004a, 2004b; Taylor and Martinez, 2011)..."

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