

Guidelines for Authors

1. General information

The journal *Ingeniería y Universidad* is edited and published every six months by the School of Engineering at Pontificia Universidad Javeriana. *Ingeniería y Universidad* aims to promote and disclose novel and relevant research work in the field of engineering.

The journal is aimed at engineering students, professional engineers, researchers, and more broadly, anyone interested in scientific and technological developments in engineering. The journal publishes only manuscripts in the English language.

2. Topics of interest

Ingeniería y Universidad publishes scientific contributions and technological developments in the different areas of Engineering. The journal especially welcomes articles on topics related to robotics and industrial automation, bio-engineering, environmental engineering, industrial engineering and transportation engineering and logistics.

3. Types of contributions

Original articles are particularly welcome, but also review articles and commentaries are considered.

4. Submission process

Contributions must be submitted through the Open Journal System (OJS) platform: <http://revistas.javeriana.edu.co/index.php/IyU/index>. To submit manuscripts authors must first request a username for the platform to: rev-ing@javeriana.edu.co. During the submission process authors will be required to provide suitable independent reviewers to speed up the process. Authors

must sent manuscripts following the journal's structure, format, and reference system.

5. Minimum formatting requirements

All contributions must comply with the following specifications:

- Articles must be submitted in electronic format using a text editor, preferably MS Word.
- Articles should be written in Times New Roman, size 12, single spaced. A maximum of 8500 words including references is acceptable.
- Articles should have a single column with justified text.
- All graphs, figures and illustrations should be located in the article, indicating titles and source.
- In addition, all graphs, figures and illustrations must be submitted as separate files using a high quality format.

6. Suggested content for the articles

Structure of the articles (applies mainly to original research articles)

- Title
- Authors' names and affiliations
- Abstract
- Introduction
- Materials and Methods
- Results
- Conclusions
- References

Abstract

The abstract must not exceed 200 words. It should be concrete and include the main results of the contribution.

Writing style

The writing must be straightforward and technical. The International Unit system should be employed. All abbreviations and acronyms must be explained the first time they appear in the text. Equations and other numerical expressions must be numbered in sequence. In the body of the article the references must be cited according to the IEEE citation style (http://www.ieee.org/documents/style_manual.pdf). Following the quoted sentence a sequential numbering within

brackets after a space, in the same line of text and before any punctuation is used. Each number corresponds to a reference containing information from the cited source. Each work cited should be separated by a semicolon (;).

Example:

As affirmed by Bettan [1]; Bettan and Hassan [4]-[9]; and Barrera [12], the wear of the material is due to the silica content in the raw material.

The numbers in brackets may also be used as nouns:

As shown in [1], [4] - [9] and [12], the wear of the material is due to the silica content in the raw material.

It is necessary to use *et al.* if three or four authors are mentioned:

According to Wong et al. [3], [10], wavelet packet division multiplexing (WPDM) using discrete wavelet packet decomposition...

References

- The reference list should be presented in the order in which the sources are cited, *i.e.*, in numerical order, not in alphabetical order by first author. At the start of each new source an identifier number in brackets (the same used in the text) is used.
- The list of references should provide the necessary information to identify and to recover the sources used.
- It is essential that every one of the quotes that have been inserted in the text has its corresponding reference in the final list, and conversely, any entry in the list of references should be cited within the text.
- First and middle names should be abbreviated by putting only initials.
- It is mandatory to reference the names and initials of all authors of a work. However, if the work has more than six (6) authors, the first author followed by expression *et al.* (in italics) will be referenced.
- For anonymous works, the first element of the reference will be the title.
- If the author is an organization, the name should be indicated as it appears in the source.
- References should keep the original language of the publication.
- To indicate the page range use “pp.” (pp. 111-122); to indicate a single page use “p.” (p. 111).

Below you will find the norms or codes for the most common references:

Printed sources

Books: Initials. Surname. "Title of book chapter" in *book title*, edition, publisher. Publisher City, Country: Publisher, year, chapter number, section number, page.

Examples:

[1] R. G. Gallager. *Principles of Digital Communication*. New York: Cambridge University Press, 2008.

[2] A. Rezi and M. Allam, "Techniques in array processing by means of transformations," in *Control and Dynamic Systems*, Vol. 69, *Multidimensional Systems*, C. T. Leondes, Ed. San Diego: Academic Press, 1995, pp. 133-180.

[3] J. A. Prufrock, Ed., *Lasers*, 2nd. ed. New York: McGraw-Hill, 2004.

Periodicals: Initials. Surname. "Title of work," *Title of journal*, volume, issue, page, month. year.

Examples:

[1] R. E. Kalman, "New results in linear filtering and prediction theory," *J. Basic Eng.*, vol. 83, pp. 95-108, Mar. 1961.

[2] J. U. Buncombe, "Infrared navigation-Part I: Theory," *IEEE Trans. Aerosp. Electron. Syst.*, vol. AES-4, no. 3, pp. 352-377, Sept. 1944.

Reports: Initials. Surname. "Title of the report," Company Name, Company City, State, Country, report number, month, year.

Examples:

[1] E. E. Reber, R. L. Michell, and C. J. Carter, "Oxygen absorption in the earth's atmosphere," *Aerospace Corp.*, Los Angeles, CA, Tech. Rep. TR-0200 (4230-46)-3, Nov., 1988.

[2] J. H. Davis and J. R. Cogdell, "Calibration program for the 16-foot antenna," *Elect. Eng. Res. Lab.*, Univ. Texas, Austin, Tech. Memo. NGL-006-69-3, Nov. 15, 1987.

Manuals: *Title of the Manual*, edition, Company Name, City of the Company, State, Country, year, pages.

Examples:

[1] *Transmission Systems for Communications*, 3rd ed., Western Electric Co., Winston-Salem, NC, 1985, pp. 44-60.

[2] *Motorola Semiconductor Data Manual*, Motorola Semiconductor Products Inc., Phoenix, AZ, 1989.

Proceedings of conferences and congresses: Initials. Surname. "Title of paper," in Title of event, -optional- location, year, pages.

Examples:

[1] S. P. Bingulac, "On the compatibility of adaptive controllers," in *Proc. 4th Annu. Allerton Conf. Circuit and Systems Theory*, New York, 1994, pp. 8-16.

[2] W. D. Doyle, "Magnetization reversal in films with biaxial anisotropy," in 1987 Proc. INTERMAG Conf., pp. 2.2-1–2.2-6.

If the year appears explicitly in the name of the event, you can omit the reference as in Example 2.

Patents: Initials. Surname. "Title of the patent," patent number, month, day, year.

Example:

[1] J. P. Wilkinson, "Nonlinear resonant circuit devices," U.S. Patent 3 624 125, July 16, 1990.

Thesis (MA) and Dissertation (PhD): Initials. Surname. "Title of the thesis / dissertation, "Identifying Master or PhD , Department, University, City, State, Country, year.

Examples:

[1] J. O. Williams, "Narrow-band analyzer," Ph.D. dissertation, Dept. Elect. Eng., Harvard Univ., Cambridge, MA, 1993.

[2] N. Kawasaki, "Parametric study of thermal and chemical nonequilibrium nozzle flow," M.S. thesis, Dept. Electron. Eng., Osaka Univ., Osaka, Japan, 1993.

Online sources

Journal articles and online reporting: Initials. Surname. (Year, month). Title of article. -abbreviated- Journal title [type of medium]. Volume (issue), paging -optional- . Available: site/path/file/DOI

Examples:

[1] R. J. Vidmar. (1992, Aug.). On the use of atmospheric plasmas as electromagnetic reflectors. IEEE Trans. Plasma Sci. [Online]. 21(3), pp. 876–880. Available: <http://dx.doi.org/10.1109/27.57528>

[2] J. Bourke. (1995, Mar.). A comparison of RF electrode models. J. Phys. [CD-ROM]. 32(4), RD2-RD3. Available: JPY File: Science Periodicals Ondisc Item: 95-76401

[3] L. Brigman (1997, Feb.). The never-ending story. WebMaster Mag. [Online]. Available: http://www.cio/WebMaster/020197_field_content.html

To reference articles not yet accepted for publication, you can use the phrase "submitted for publication/sometido para publicación" instead of the date. If the article has already been accepted but not yet published, you can use "to be published/en prensa" instead of the date.

Reports and manuals: Initials. Surname. (year, month). Title of report or manual [Type of medium] . Available: site/path/file/DOI

Example:

[1] S. L. Talleen. (1996, Aug.). *The IntraNet Architecture: Managing information in the new paradigm*. Amdahl Corp, CA. [Online]. Available: <http://www.amdahl.com/doc/products/bsg/intra/infra/html>

Government documents: Legislative body. Number of Congress, Session (year, month. Day). Bill or Resolution Number, Title [Type of medium] . Available : site/path/file/DOI

Example:

[1] U.S. House. 102nd Congress, 1st Session. (1991, Jan. 11). H. Con. Res. 1, Sense of the Congress on Approval of Military Action. [Online]. Available: LEXIS Library: GENFED File: BILLS

Patents: Name of invention, Inventor's name. (year, Month. Day). Patent Number [Type of medium]. Available: site/path/file/DOI

Example:

[1] Musical toothbrush with adjustable neck and mirror, by L.M.R. Brooks. (1992, May 19). Patent D 326 189 [Online]. Available: NEXIS Library: LEXPAT File: DESIGN

The journal's Board of Directors or the Editorial Committee reserves the right to accept or refuse to publish work that does not adhere to the aforesaid norms and rules.