

Guidelines for publication

The journal is a biannual publication of the Master of Medical Devices of TEC, which links professionals in the fields of engineering and health sciences, and its main objective is to serve as a platform for the exchange of knowledge in this field.

All authors can submit their manuscript by sending it to the Editorial Director e-mail: jcubero@itcr.ac.cr. As soon as the paper is processed, the author will be contacted.

Receipt of a job does not imply any commitment to publication by the journal.

The Editorial Board will analyze and select the works according to the format and content criteria, seeking a contribution to the knowledge and scientific exchange of professionals in the field.

As the Editorial Board considers, the articles will be accepted or rejected, or revisions will be suggested prior to publication:

- Comments to the author or authors, indicating in their case, points to reconsider, explain or modify.

Structure and format for sending the articles

- Items must be submitted in English.
- The article should indicate the category of the publication. Applied Engineering, Academic Focus or Technical Note. It must be presented in text format (Microsoft Word .doc, Open Office .odt, etc.) written in Arial 12, double-spaced.

The articles should not exceed fifteen thousand characters, without spaces and the maximum of ten figures.

- Images or photographs: Images must be sent in a separate file from the main document.

They must have a minimum resolution of 300 dpi and the supported formats are PDF, JPG, TIF or EPS. They must be clearly identified with numbers to know their precise location in the main document.

- Graphics, tables, tables: can be included within the same file as the main document.

Structure of the article (for Applied Engineering or Academic Focus type of articles):

- Title: must be in Spanish and English, in affirmative, capitalized, bold and centered; Its maximum extension is ten words and in extreme case fifteen.
- Authors: immediately below title, sorted according to scientific contribution; The name and a single last name are noted; If both surnames are used, they must be joined by a hyphen. At the bottom of the page, with an asterisk or Arabic number to identify each author, the name, profession, academic degree, institutional position, city, country and e-mail address must be attached. Indicate the professional qualities (academic degree and name of the career that is taken in case of university students, or, the respective specialty). It must indicate the current position or position of each author.
- Spanish summary: 150 to 250 words in the third person.
- English abstract: must be a faithful translation of the Spanish summary.
- Keywords: both in the summary in Spanish and in the English abstract, must be from three to ten words; Only the use of nouns or affirmative sentences are allowed; It is not allowed to use adjectives, abbreviations, adverbs, synonyms, isolated verbs, conjunctions or articles; keywords will be written separated by a comma.
- Introduction: it presents what the researcher tries to reach, observe or measure, and why; Is written in the affirmative, subject to a single interpretation. It includes research questions, problem statement and justification, general context or background, critical or historical review of existing knowledge; The strategy or method that was used to solve the problem; The frame of reference or the concepts necessary to make clear the theoretical position of the author; should be strictly limited to the subject matter without extensive review. If it is a case study, it should justify publication with epidemiological or clinical arguments and their implications for public health, other reported cases are reviewed and articles and references are included.
- Material and method, or subjects and methods, in research articles: describes how the research was done; May consist of the following parts:
 - Design: mentions the premises and limitations, the instruments used, their validity and reliability, and the reason for their choice. When it comes to established and well-known methods, they are indicated by bibliographic citations; When they are new or modified methods, should be described in detail.
 - The population: details the size and the way in which the representative sample was selected, as well as the inclusion and exclusion criteria. The term "participants" is used when they are human, and the term "subjects" when dealing with non-human individuals.
 - The environment: indicates where the research was performed.
 - Interventions: explains the techniques required for the execution of the research or procedures performed, so that the experience can be reproduced. It also clarifies whether the procedures followed conform to national and international ethical standards, how the informed consent was obtained, and the record of the review of the investigation by an institution's board or ethics committee.
 - The analysis: details the strategies and procedures that will be used to analyze or process the data, results or information obtained. It should reflect that the statistical procedures used were correct; If the study has hypotheses, the approval or rejection of it should be clearly stipulated. If the study included study and control groups, these should be compared, indicating precisely the duration of the study (follow-up) for both. It should be considered whether the data were analyzed by qualitative, quantitative or both techniques and indicate the steps that were followed to validate the results.
- Results: the research question or the hypothesis test must be answered. It is recommended to present them in the order the objectives were set. The data must be presented in a specific form, without comments or arguments, or value judgments, nor justifications. Do not repeat all the data in the tables and figures, only summarize the most important, on the other hand, tables should not duplicate the text. In the writing of the results, perfect past tense must be used in impersonal construction ("discovered"), no first person singular or plural should ever be used.
- Discussion and comment, the answer to the question posed in the introduction is presented, followed by the tests shown in the results. Examine and interpret the results. It determines the coherence or contradictions of the data found within the context of current scientific knowledge, does not polemize in a trivial way.

- **Conclusions:** The contribution ends with one or several conclusions that are a synthesis of the discoveries, without drawing more conclusions than the results allow. In the case study, the main findings, particularities or contrasts should be counted. The conclusions are written in present tense ("these data indicate"). Recommendations may be included if appropriate.

Structure of technical notes

Technical notes should follow the same structure as regular articles up to the introduction section, then they should present the General Objective, Specific Objectives, Justification, State of the Art, followed by conclusions and references as in regular articles.

Acknowledgements

The authors can recognize any persons or organizations that provided support and/or funding to carry out the activities.

References

- Must be submitted according to APA format.
- All references presented in this section should be in order of citation in the text and must be cited somewhere in the text, using a number within square brackets, and presented in this section.
- The minimum number of references per contribution is 8.

Graphic elements:

- **Tables:** they should not bring vertical lines, only horizontal lines, and should cover the entire width between the left margin and the right margin.
 - Titles should be brief, clear and explanatory; Should be in italics, except for the word "Table" and the number that identifies it. The title, like the number, goes at the top of the table and no indentation.
- In the case study articles, use of x-rays, ultrasound, tables and comparative graphs is allowed. You can include three to five photographs, with their corresponding caption, the name of the case and a short description.

Article submission

Items must be sent to:

Jorge Cubero Sesin

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