

GUIDE FOR AUTHORS. EDITOR'S CRITERIA FOR PUBLICATION

A copy of detailed instructions for the authors at:
http://www.revistadyna.com/doc/_des/eng/norm_extend.pdf

CLEAR DEFINITION OF OBJECTIVES AND ACHIEVEMENTS OF THE WORK (Why, What for, Results)

It is very important that the articles always then sit up:

- In the introduction, the reasons or motivations that have led the authors to undertake the work they are going to describe and the practical goals that were proposed with the same.
- In the conclusions, the actual results achieved with the development and/or the Discussion exposed, to be possible by comparing with the objectives and adequately quantified, as well as the practical implementation effective they're going to have and its continuity in a time near future.

To expedite the work of revision, please check whether the text incorporates this content, especially for the proposals to be considered for research or application of best practices, as otherwise will not be evaluated .

CHARACTER STUDY AND CLARITY OF THE WORK

DYNA Energy & Sustainability (DYNAES) is a Journal about Energy Technologies and Sustainable Development

The editor searches for content and ideas that can be carried out and can be useful to the engineer in his profession. It is important the clarity and simplicity in the language and the exposure, explaining the terms or concepts.

We propose to make the effort - especially in the cases of topics with a high content in special technologies or high scientific level - to seek for basic understanding. Especially in the sections of "*introduction*" and "*conclusions*", using some of the procedures visible in the examples provided below.

It is recommended to define along the article:

- The BASIC CONCEPTS of the subject.
- The current state-of-the-art technology.
- The practical objective that proposes the research.
- The current or future application.
- The subsequent development of this technology and its impact on industry.

TECHNOLOGY READINESS LEVEL (TRL)

The author must take into account and define the TRL level of the submitted work:

- LEVEL 1 - Lowest level of technology readiness. Scientific research begins to be translated into applied research and development (R&D). Examples might include paper studies of a technology's basic properties..
- LEVEL 2 - Invention begins. Once basic principles are observed, practical applications can be invented. Applications are speculative, and there may be no proof or detailed analysis to support the assumptions. Examples are limited to analytic studies.
- LEVEL 3 Active R&D is initiated. This includes analytical studies and laboratory studies to physically validate the analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative.
- LEVEL 4 - Basic technological components are integrated to establish that they will work together. This is relatively "low fidelity" compared with the eventual system. Examples include integration of "ad hoc" hardware in the laboratory.
- LEVEL 5 - Fidelity of breadboard technology increases significantly. The basic technological components are integrated with reasonably realistic supporting elements so they can be tested in a simulated environment. Examples include "high-fidelity" laboratory integration of components.
- LEVEL 6 - Representative model or prototype system, which is well beyond that of TRL 5, is tested in a relevant environment. Represents a major step up in a technology's demonstrated readiness. Examples include testing a prototype in a high-fidelity laboratory environment or in a simulated operational environment.
- LEVEL 7 - Prototype near or at planned operational system. Represents a major step up from TRL 6 by requiring demonstration of an actual system prototype in an operational environment (e.g., in an aircraft, in a vehicle, or in space).
- LEVEL 8 - Technology has been proven to work in its final form and under expected conditions. In almost all cases, this TRL represents the end of true system development. Examples include developmental test and evaluation (DT&E) of the system in its intended weapon system to determine if it meets design specifications.
- LEVEL 9 - Actual application of the technology in its final form and under mission conditions, such as those encountered in operational test and evaluation (OT&E). Examples include using the system under operational mission conditions.

A later step or LEVEL 10, would be the identification and/or implementation of improvement deriving from its operation.

The proposals classified in levels 1 and 2, in the case of does not contain an appreciable originality, if appropriate, may be approved as collaborations.

INFOGRAPHICS AND TEXT BOXES

It is author's decision the way to incorporate these requirements; the advantage to doing it separately (in a box or infographics attached) is that the reader does not need review concepts that you already know. The editor recommends to take the point of view of an

multidisciplinary engineer with technological concerns who wants to be informed about the scientific advances that engineering can make to the development of our society.

Below you can see some examples of how clarify concepts, by means of explanatory boxes, in the content of a paper:

Óptica
2209-90 Tratamiento digital de imágenes

LA VISIÓN ARTIFICIAL EN EL CONTROL DE CALIDAD. Desarrollo de un escáner láser tridimensional relativo
Artal Pico Ruiz, IP Aracazo Beccarino Pérez, José Angel Gutiérrez Olibarri, Iosa Pérez Larrazabal

TRIANGULACIÓN ÓPTICA LÁSER

La triangulación óptica láser es un método de obtención de medidas del espacio que se fundamenta en la variación de proyección, sobre un sensor convenientemente ubicado, de una fuente de luz, normalmente un láser iluminando un objeto, y calculadas en función de la distancia entre la fuente de luz y el objeto.

En las imágenes puede verse el fenómeno tanto en el caso de que la fuente de luz sea puntual como en el caso de una línea. La imagen obtenida en el sensor se "desplaza" y deforma en función de las características tridimensionales del objeto. Las técnicas de reconstrucción tridimensional basadas en láser establecen una relación entre la distancia real y la imagen observada.



sistema gira y se procede a la captura y procesamiento de los biselados de los casquillos en sus dos caras.

Una vez que se logra la reconstrucción tridimensional del casquillo, así como la obtención de los parámetros objetivo y datos estadísticos, cada casquillo se clasifica atendiendo a los resultados de la inspección. El sistema indica al robot el resultado final del ensayo y cada casquillo se deposita en el sistema transportador correspondiente. Esta operativa se repite cíclicamente.

Se presenta en la figura 3, un esquema de la planta industrial en la que se ha implantado el sistema, cuyos elementos constituyentes son:

INFORMACIÓN BÁSICA SOBRE LA RADIOACTIVIDAD

La radioactividad es un proceso espontáneo en el transcurso del cual una serie de núcleos atómicos inestables se desintegran emitiendo energía, formando núcleos más estables de menor masa. La energía toma la forma de radiaciones alfa o beta, a menudo acompañadas por la radiación gamma. La emisión alfa está asociada con los núcleos muy pesados, como el uranio. Corresponde a la expulsión de dos protones y de dos neutrones, es decir, de un núcleo de helio. La emisión beta proviene de núcleos que presentan un exceso de neutrones o de protones. Algunos neutrones sobrantes se transforman entonces en protones con una emisión de electrones, o a la inversa, protones se transforman en neutrones con una emisión de positrones. Finalmente, la radiación gamma es una emisión de fotones con alta energía que acompaña estas transformaciones nucleares.

Con arreglo a la naturaleza del núcleo, estos procedimientos radioactivos pueden tener una duración distinta. Denominamos periodo de semidesintegración o semivida de un elemento a la duración necesaria para que la radioactividad de una muestra quede dividida por 2. Por ejemplo, un bloque que encierre 1 mg de ^{60}Co (cuya semivida es de 5,2 años) sólo contendrá 0,5 mg después de 5,2 años, 0,25 mg tras 10,4 años, etc.

La "actividad" de una fuente es el número de desintegraciones radioactivas por segundo y se mide en Bequerelios (Bq). La "dosis", la unidad directamente relacionada con los efectos biológicos de la irradiación, se expresa en Sieverts (Sv). Así, el ser humano se muere casi con total seguridad si se expone a más de 10 Sv, mientras que el nivel de radioprotección aceptable para las personas se sitúa alrededor de 0,001 Sv al año. En general, por debajo de 0,005 Sv por hora, se considera el residuo de actividad débil, entre 0,005 y 2 Sv por hora, de actividad media, y más allá, se considera de alta actividad.

GENERAL RECOMMENDATIONS

The letter of presentation.

Not to forget the importance of a good letter of presentation of the work. This is the first opportunity to try to generate a good impression about the article, its conclusions and their impact on the engineering. The letter helps the Publisher to understand the implications of the manuscript and is where the author explains the main contribution to the engineering.

The letter of introduction should not be too extensive, it will suffice for 4 or 5 paragraphs. The home must be to make an introduction to the study and their authors can be explain the premises of the work and why this development or discovery is interesting and novel. End the letter by stating any conflict of interest that may be incurred and confirming which have not been published or has been sent to another medium.

The title.

Use a short title that is understandable and attractive (10 or 15 words). Do not use abbreviations, acronyms, jargon unknown to the non-specialist, neither too many prepositions. Bear in mind that the goal is to attract readers very various. If readers can't understand the title, they hardly will read the article.

Include key words self-explanatory of your work.

The title can be prepared by focusing on:

- The problem we are trying to solve
- The method and purpose of the research
- The final conclusion of the work

The Abstract.

The Abstract is like a "fishhook" and contains the information that the reader reviews before deciding if they will read the article completely or desist. Well worth the effort in its preparation to make it attractive and easy to understand. Should be informative but not too detailed.

Start with one or two sentences that define the framework of the work. Submit the system or problem being studied indicating which was the situation up until now. Then turn to define the discovery or innovation provided by briefly outlining the method used. Finish the abstract indicating the implications or conclusions of the work.

Key Words.

The key words must make a clear idea of the subject matter. Select 5 or 6 in english and spanish.

In case of doubt in the selection, use *google trends* to choose the most sought after on the Internet to maximize their reach.

[Diffusion after the publication.](#)

The dissemination of the work done by the author does not end when the article is finally published in the journal. Internet is a powerful tool that the author should use for his advantage.

DYNAES, unlike other journals, offers the author a coded link for the published article that allows direct access free of charge on our servers. In this way, the author may publish the link of the paper in his blog, website, social networking specialist (*Research Gate*), ...