

## **DYNA NEW TECHNOLOGIES JOURNAL (DYNANT) GUIDE FOR REFEREES**

The purpose of this document is to help referees elaborate their reports. It should not be understood as a constraint for this task. Referees may expand on these general guidelines and add any comments that they deem relevant in order to improve the formal layout and content of manuscripts that have received a positive evaluation.

A detailed copy of the instructions for authors can be found at:

[http://www.revistadyna.com/doc/\\_dnt/eng/norm\\_extend.pdf](http://www.revistadyna.com/doc/_dnt/eng/norm_extend.pdf)

The editors pay particular attention to the following aspects:

1. **ORIGINALITY AND INNOVATION** of the paper
2. **USEFULNESS AND INTEREST** for readers
3. **CLARITY** of exposition
4. **CONCLUSIONS DERIVED** from the research (for research papers)
5. **TECHNOLOGY READINESS LEVEL: TRL** (See deeper explanation at the end of this guide)

Each of these criteria should be rated on a scale on 1 to 5, where 5 is the highest rating and 1 is the poorest one. Comments should be included to justify each rating.

Referees are asked to maintain a responsible, impartial, confidential and positive attitude in evaluating manuscripts. They should also instruct authors on how to strengthen their papers. Unfavourable reports should explain the weaknesses of the contributions and offer some feedback on how the paper could be improved in case the author wishes to publish it elsewhere.

The ideal review should answer the following questions:

1. Who will be interested in reading the article? Why?
2. What are the major claims and how significant are they?
3. Could this paper be considered as one of the 10 most important articles published this year in its field?
4. How can this article be compared to others in its field?
5. How original are its claims or conclusions? Are there other articles that undermine their originality?
6. Are the conclusions well-argued and well founded? If not, what evidence is lacking?
7. Are there other methods or experiments that would strengthen the work? How much time and effort would the author need to complete them?
8. Are the claims adequately discussed in the context of earlier literature?
9. If the work is rejected, is it sufficiently promising to encourage the author to introduce modifications and re-submit for a fresh review?
10. If the work is rejected but sufficiently promising, what specific modifications should the author implement?

Both authors' and referees' anonymity will be preserved at all times during the review process.

- If the manuscript is deemed unacceptable, referees are asked to indicate the reasons for its unacceptability using the document:

*[http://www.revistadyna.com/doc/\\_dnt/eng/evaluation.rtf](http://www.revistadyna.com/doc/_dnt/eng/evaluation.rtf)*

Two types of negative reports are possible:

1. Definitive rejection. The paper is rejected for reasons having to do with obvious lack of novelty, insufficient conceptual originality, erroneous conclusions etc.
2. Rejection with a recommendation to resubmit. The work is rejected, but authors are advised on how to improve the manuscript so that it can be resubmitted for a fresh review.
  - If the manuscript has to be revised or modified, referees should indicate what modifications should be implemented.
  - If the manuscript is accepted, referees are asked to highlight briefly its strong points

Referees are asked to provide a reasoned recommendation regarding publication using the form *revision\_articulo\_editor.rtf*. Referees should take into account that different referees of the same manuscript may have different technical abilities or viewpoints and that the editors may have to make a final decision regarding publication based on competing reviews. It is therefore paramount that referees indicate clearly the reasons for their recommendations.

Referees should maintain a respectful attitude towards the authors. Potentially offensive comments must be avoided. DYNANT reserves the right to modify referees' reports if these contain offensive language or if confidential information about the referee is disclosed.

Referees should inform the editors of any conflict of interest in relation to the work that is to be assessed, whether this is a personal, academic, research-related, economic or financial conflict of interest.

In order to speed up the review process, referees are asked to return their reports for the author and for the editors within 30 days of receiving the manuscript.

In DYNANT's experience, peer-review is an essential part of the publication process. Referees' reports offer an independent assessment of the manuscript and provide authors with feedback which, together with the editor's advice, often contributes to improving the structure and logic of the papers we publish.

## **TECHNOLOGY READINESS LEVEL (TRL)**

The referee must take into account and define the TRL level of the evaluated 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.