

## Ethical Requirements for Submissions Made to Conferences and Publications of the International Institute of Informatics and Systemics (IIS)

### Purpose:

An increasing number of challenges have been created by products like ChatGPT, known as large language models (LLMs) for the required peer-reviewing and, in general, publishing processes, especially in what is related to the new academic and research ethical issues that have emerged.

The “*International Institute of Informatics and Systemics*” (IIS) needs to take care of this new situation that emerged, including the real authorship of abstract, short, and full articles submitted to any IIS conference or publication. In this context, *there is an emergent need 1) to avoid new possibilities of misleading peer reviewers and/or plagiarizing activities, among other unethical academic activities; and, hence, to adapt the ethical requirements that potential authors should meet.*

Since 2022 it has been reported that “some scientists were already using chatbots as research assistants to help organize their thinking, generate feedback on their work ... and summarize research literature” (Nature 611, 192–193; 2022, referenced in one of its editorials [\(612 | Nature | Vol 613 | 26 January 2023\)](#)).

But, as Springer Nature also affirms in the same mentioned editorial

“the release of the AI chatbot ChatGPT in November has brought the capabilities of such tools, known as large language models (LLMs), to a mass audience. Its developers, OpenAI in San Francisco, California, have made the chatbot free to use and easily accessible for people who don’t have technical expertise. Millions are using it, and the result has been an explosion of fun and sometimes frightening writing experiments that have turbocharged the growing excitement and consternation about these tools

This is the reason why an increasing number of publishers think that they “need to acknowledge [these and similar] tools’ legitimate uses and lay down clear guidelines to avoid abuse”, as written in Springer’s Editorial [\(612 | Nature | Vol 613 | 26 January 2023\)](#). This is the purpose of this short article.

The same Springer Editorial affirms that

“[t]he big worry in the research community is that students and scientists could deceitfully pass off LLM-written text as their own, or use LLMs in a simplistic fashion (such as to conduct an incomplete literature review) and produce work that is unreliable. ***Several preprints and published articles have already credited ChatGPT with formal authorship.*** That’s why it is high time researchers and publishers laid down ground rules about using LLMs ethically. Nature, along with all Springer Nature journals, has formulated the following two principles, which have been added to our existing guide to authors” [Italics and emphasis added]

Then Springer Nature adopted the following two requirements for any submission to be sent to them

**First**, no LLM tool will be accepted as a credited author on a research paper. That is because any attribution of authorship carries with it accountability for the work, and AI tools cannot take such responsibility.

**Second**, researchers using LLM tools should document this use in the methods or acknowledgments sections. If a paper does not include these sections, the introduction or another appropriate section can be used to document the use of the LLM [Emphasis added]

We have similar requirements, but asking the submitting authors to be more specific.

### **The Methodology that Will be Followed for Continuous Adaptations**

We will be following an *incremental-evolutionary methodology* oriented to, continuously, decrease the probability of authors misleading or including plagiarized texts in any kind of submissions made to any IIS conferences or publications.

Since it is not adequate to wait until a final methodology may be achieved; which never may be achieved because of 1) the accelerated change dynamic of products like ChatGPT and 2) the methodology should be based on continuous action-learning and action-design processes, the most adequate methodology design should be a highly adaptable one because of the learning processes regarding the kinds of unethical academic behavior that may be emerging from the authors or newly facilitated by new versions of the same product or by other similar or related innovations.

It is probably a redundancy to mention that achievement of this purpose will be restricted by financial, economic, and human resources, which; in turn, are restricted by the respective registration fees or Article Processing Costs. The IIS is a not-for-profit institute but has never had any sponsor, different from the participants in their conferences and publications. These sponsorships have been via registration fee and/or Article Processing Cost/Charge (APC)

### **Ethical Requirements for Making any kinds of Submissions**

Since submitting triggers, immediately, costs to be covered by participants' registration fees and/or Articles Processing Charges (APC), then the ethical requirements are related to the participants of the conferences or the authors of the publications, this means that the ethical responsibility of the IIS is not just related to 1) Academic Ethical Behavior but also to 2) fairness with the conferences' participants and/or authors in different publications. The latter is based on the very simple principle of justice and this is why a violation of the following ethical requirements may even have legal consequences.

With no more ado, let us list the list of the minimum ethical requirements to be met by anyone making any kind of submission or uploading any kind of article, no matter how many words the article may contain

1. In general terms, the author should follow the ethical standards of academic honesty that exclude, at least, academic malpractice (e.g., lack of integrity, plagiarism, falsifying, cheating, hiding, lying, lack of honesty, etc.)

2. If an author uses ChatGPT text, s/he should
  - **take full responsibility, i.e., holding her/himself totally accountable, for the cited text**, similarly to when another author is cited. It is academic misconduct to cite any text which happens to be false or incoherent with its context. The author's good judgment would be questioned and her/his credibility would be lost. The latter would be fair and correct.
  - Any reviewers would certainly notice a wrong text, or incoherent with its context, no matter what is the credibility of the cited source. To cite a text completely irrelevant, incoherent, or with no evident connection to the main text, context, or reasoning is wrong and/or academic malpractice, no matter the cited source.
3. **No author may have ChatGPT as a co-author.** This seems so evident that there is no way to understand how some authors have placed ChatGPT as their co-author.
4. Using ChatGPT for learning purposes:
  - a. May be mentioned as part of the listed bibliography, as usually is done with books that have previously been read, but no specific text is being cited or no specific issue has been addressed, as to cite it with the specific page, sections, or chapter.
  - b. In some situations, the questions made to ChatGPT, in the learning process, maybe, academically, as valuable, or even more valuable, than the answer provided by ChatGPT. In such cases, it is recommendable to cite both the question and the answer. Depending on the opinion of the writer, this may be included in the main text or an endnote. Regarding this issue, we asked ChatGPT the following question:

*Are there situations where the question made to ChatGPT is as academically valuable, or even more valuable than the answer provided by ChatGPT? And the answer was the following:*

*Yes, there can be situations where the question made to ChatGPT is as academically valuable, or even more valuable than the answer provided by ChatGPT. This is because the act of formulating a good question can be an important part of the research process and can help to guide and refine your thinking on a particular topic.*

*Asking a good question requires careful consideration of the topic, an understanding of the relevant literature, and an ability to articulate the research problem or question clearly and concisely. This process can help to identify gaps in your knowledge or areas where further research is needed and can lead to the development of new research questions and ideas.*

*In some cases, the question itself may be more valuable than the answer provided by ChatGPT because it can stimulate further discussion, debate, or research. For example, a well-formulated research question may inspire other scholars to investigate the topic further, leading to new insights and discoveries.*

*Therefore, even if ChatGPT does not provide a satisfactory answer to your question, the act of asking the question and the insights gained from the process can still be valuable to your academic work.*

***So, it would be up to the writer and the reader to value both: question and answer. In any case, the writer would have been honest with the writer and, potentially, may gain support for the main reason s/he has made the article, i.e., a similar kind of support that is usually gained by mentioning other writer or article.***

5. Using ChatGPT for References: one of the following two options should necessarily be followed:
  - To verify that the citation is correct and provide the link where the reader may verify it.
  - Meta-Cite ChatGPT as a reference who referenced it. This is a must in making a citation made by another writer. It is a matter of ***honesty*** about who did the verifying job. In the case of ChatGPT, it is even more important because of the number of erred citations that ChatGPT usually makes. This is why in this case ***it is not just a matter of honesty but also of the writer's responsibility of alerting the reader about the possibility of an error made by ChatGPT***
6. It's important for writers to differentiate between questions and answers to facilitate adequate judgment on behalf of the reader. This is not only an ethical consideration but also a matter of showing respect to the reader. Therefore, it's crucial for writers to prioritize clarity and honesty in their work, and to present information in a manner that enables readers to make informed decisions

The author should have the ethics of differentiating between questions and answers because of the importance this may have for facilitating an adequate judgment on behalf of the reader. This is not just a question of ethics but also regarding a minimum of respect for the reader. So, it is even a pragmatic problem (not just a matter of ethics and respect for the reader) because the impact factor of an article depends on its readers and, consequently, on their perceptions, conations, and affection, not just on their cognition. These three components of the intellect are cybernetically related to each other. They co-regulate and/or co-reinforce each other.