

Review of: "[Review] Optimizing Wastewater Treatment Performance System and Achieving Greater Efficiency to Improve Water Quality for Sustainability — A Review"

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Potential competing interests: No potential competing interests to declare.

FOR AUTHORS

The focus of the review manuscript is to evaluate wastewater treatment systems to improve water quality based on sustainability. A subject of scientific and social interest considering the impact of pollution on the environment and biological risk. A very current topic.

The text is well-written. The authors emphasize the importance of wastewater treatment methods in various sectors, highlighting their biotechnological significance throughout the text. Overall, Overall, the authors highlight the biotechnological importance dos métodos in several sectors.

However, authors must use current references at various points in the text to demonstrate the relevance of the manuscript topic. However, authors must use current references at various points in the text to demonstrate the relevance of the manuscript topic.

The review article provides valuable information on the topic at hand as a review article provides a broad overview of wastewater treatment systems and sustainability.

Review articles are relevant and show scientific studies and the potential industrial application of the subject. The review article is a remarkable contribution to the scientific community.

The authors should review the following points to increase the article's visibility. The manuscript is good and relevant and the requested points are important to improve it further.

- 1. Some items or phrases require updated references, such as reference [1] on pollution from human and industrial activities. For instance, reference [1] must be up-to-date on pollution caused by human and industrial activities today.
- 2. The analogous situation regarding reference [36] in item 3.3.4, [18] item 3.3.5; reference [37] item 3.3.7.
- 3. In item 3.3.8, authors should include more references to emphasize the importance of the subject. There are also other points in the text in which the authors place only a reference. For the reader's benefit, it would be advantageous to incorporate supplementary references to enhance the informativeness of the text.
- 4. No item 3: Process of wastewater treatment, the authors do not describe the association between different water



treatment methods, such as biological treatment and electrochemical methods, during the process of wastewater treatment. Electrochemical oxidation can effectively break down both partially and fully organic pollutants, especially those that are persistent. However, these processes can generate other equally toxic compounds. The combination of processes is to improve degradation. Several publications detail the use of this method in conjunction with biological processes.

- 5. In item 3, there is no description of secondary pollutants resulting from natural degradation or resulting from different treatments. These secondary pollutants can be more toxic than the primary ones.
- 6. The issue of updating references or inserting new references implies changes/adjustments in the text.
- 7. Figure 4 is cited but not included in the manuscript.

FOR EDITOR

The authors highlight the biotechnological relevance of wastewater treatment systems to improve water quality based on sustainability. One topic that is currently of importance to both the scientific and societal communities.

The manuscript is scientifically interesting. Just a few points, most of them associated with references, should be reviewed by the authors, considering their importance in a review article.

References are an integral part of scientific writing as they help to validate the accuracy of the collected data. In a review article, recent references highlight the subject's importance, while older ones provide a comprehensive view of the scientific and industrial landscape, establishing its relevance. The manuscript is good and relevant and the requested points are important to improve it further.

Authors should analyze recent references when inserting them and adjust the text accordingly. Please see comments for the Authors.

The manuscript, presented as a review article, makes an excellent contribution to the scientific community.

After making the necessary minor corrections, the manuscript should be accepted.