

Reviewer # 1

Comment 1. row 68 - title of Table 1 should be in separate row, not continued in text (maybe this happened when word file was converted in pdf, but it has to be corrected).

Response: As per the reviewer's suggestion, the title of "Table 1", including the table heading number has been moved to a new row for further clarity.

Comment 2. Also Table 1. - Does removal efficiency of NH_4 , NO_3 and P, as well as biomass productivity, depend on the used technology (like pyrolysis) or operative parameters? If so, this technology should also be stated in the Table because the amount of biomass produced varies greatly. So, for better understanding of these differences, and to find a connection between the values in the table, you should extend the table and add more information.

Response: The removal efficiency of NH_4 , NO_3 and P and biomass productivity depend on the algae growth condition including nutrient and light availability, temperature, type of reactor, wastewater and algae strain used, not the downstream processing, i.e., pyrolysis and hydrothermal techniques, employed to convert algal biomass to valuable chemicals. NH_4 , NO_3 and P present in wastewater are absorbed and/or consumed by the algal cells and biomass is produced. Then, produced biomass is converted to beneficial chemicals using various thermal techniques. Although all these points were clearly stated in the original manuscript, for further clarification, we inserted two new columns in table 1 indicating the type of reactors used and the light intensity during cultivation. The temperature in all studies was within room temperature range i.e. 25 to 30 °C.

Comment 3. row 130-132 different font in word Bijerinckia (I know that's because of the hyperlink, but the size of the word should be aligned with the rest of the text).

Response: The font type and the size have been modified as requested.

Comment 4. The chapters are not numbered well. First three chapters are not numbered at all. Then there is chapter 3.1, followed by 1.1.1 and 3.2.1.... This must be corrected.

Response: All the chapters have been properly numbered as per the reviewer's suggestion.

Comment 6. Chapter Thermal conversion processes - explain why did you decided to describe only pyrolysis and hydrothermal conversion, and not the other methods.

Response: The focus of this review is thermal processes, not chemical or biological processes. Considering that the topic is very broad, this review honed in to the most investigated and versatile techniques used for biomass conversion to valuable chemicals.

Comment 7. row 328 - abbreviation of HTL is used for the first time. Before abbreviation there should be a full description.

Response: The description of the HTL is inserted in the text.

Comment 8. row 340 different font in word aromatic compounds

Response: The correction has been done.

Comment 9. row 343 different font in word pyrazine

Response: The correction has been incorporated in the revised manuscript.

Comment 10. row 394-395 the paragraph is broken in the wrong place.

Response: This correction has been incorporated in the revised manuscript.

Comment 11. - title of Table 3 should be in separate row

Response: This correction has been done.