

Interactive comment on “Optimizing the impact of temperature on bio-hydrogen production from food waste and its derivatives under no pH control using statistical modelling” by A. Sattar et al.

Anonymous Referee #1

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General Comments This paper was a pleasure to read. It reports a well-designed experiment, to investigate the impact of temperature on bio-hydrogen production from food waste, noodle waste and rice waste that was not observed previously under same set of conditions at one platform. The comparison of hydrogen production potential of tested wastes with each other under mesophilic and thermophilic conditions make present study novel and different from the earlier studies that focused on food waste alone or rice waste under at one temperature. Most of the literature is adequately referred to postulate the hypothesis, however the studies conducted under psychrophilic temperature conditions should be added to provide better understanding to the readers. As a whole, the paper is well-organize and manages to give reader

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excellent overview of the impact of tested waste with respect to each other. The following list of suggestions is of minor editorial nature. Specific Comments Page 12831-32, the discussion about hydrogen production with time focused on the quantity of hydrogen produced in term of volume (mL), which is not suitable for readers. So it is better to represent in term of percentage of total hydrogen production observed for specific waste under specific conditions. It can improve the representation of results and develop better understanding. Page 12833, line 6-9, How the decrease in COD removal efficiency was observed with an increase in temperature? Technical comments Page 12832, line 21-22 need revision Page 12833, line 7, need grammatical revision Page 12833, line 27, reconsider the duration mentioned 28-72 or 24-72 Page 12835, line 20-21 need grammatical revision

Please also note the supplement to this comment:

<http://www.biogeosciences-discuss.net/12/C4853/2015/bgd-12-C4853-2015-supplement.pdf>

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