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Interactive comment on "Changing mineralogical properties of shells may help minimize the impact of hypoxia-induced metabolic depression on calcification" *by* Jonathan Y. S. Leung and Napo K. M. Cheung

Anonymous Referee #5

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The manuscript "Changing mineralogical properties of shells may help minimize the impact of hypoxia-induced metabolic depression on calcification" presents a study on the influence of Hypoxia on respiration rates, shell growth and clearance rate of the calcifying polycheate Hydroides diramphus. Considering the the trend of expanding OMZs in the modern ocean, studies on the influence of Hypoxia on different organisms is getting more and more important.

Since there are already 4 detailed reviews presents for the manuscript I try to keep it short. Most of my issues have already been addressed by the other reviewers. My

main concerns also include the tracking of pH and oxygen during the incubations. The authors already responded that they will provide the pH for the experiment and to discuss the possible influence of the pH change of the organism. It is still not clear to me, though, if and how oxygen was controlled and the Hypoxia were maintained. Was the gas mixture bubbled through the bottles which were used for the incubations during the experiment or was just hypoxic water added to the bottles and then they were closed? In the latter case I would think the water wouldn't stay hypoxic very long. Was the oxygenation constantly monitored or just during certain times of the experiment? I think this is the most urgent information which has to be provided/clarified in the revised manuscript. Furthermore, I think the manuscript would benefit if parts of the discussion which include some overinterpretations or generalisations would be rewritten.

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