

Prof. Yu Huang
State Key Lab of Loess and Quaternary Geology
Institute of Earth Environment, Chinese Academy
of Sciences, Xi'an, 710061, China
Tel./Fax: (86) 29-62336261
E-mail: huangyu@ieecas.cn

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Dear Prof. Chan,

Revision for Manuscript acp-2021-890

We thank you very much for giving us the opportunity to revise our manuscript. We highly appreciate the editor for their comments and suggestions on the manuscript entitled “**OH-initiated atmospheric degradation of hydroxyalkyl hydroperoxides: mechanism, kinetics, and structure-activity relationship**”. We have made revisions of our manuscript carefully according to the comments and suggestions of editor. The language issues have been corrected carefully in the revised manuscript. The response letter to editor is attached at the end of this cover letter.

We hope that the revised manuscript can meet the requirement of Atmospheric Chemistry & Physics. Any further modifications or revisions, please do not hesitate to contact us.

Look forward to hearing from you as soon as possible.

Best regards,

Yu Huang

Comments of editor

1. Line 340: "The most likely reason is the stability...", not "the most likely reason is due to the stability"

Response: Based on the Editor's suggestion, the mentioned sentence has been corrected as "The most likely reason is the stability of pre-reactive complexes that IM8-a is more stable than IM6-a in energy."

Corresponding description has been revised in the page 13 line 341-342 of the revised manuscript:

The most likely reason is the stability of pre-reactive complexes that IM8-a is more stable than IM6-a in energy.

2 Again, I suggest the authors go through and review the language issues of the whole manuscript thoroughly, in addition to the areas the reviewers and myself pointed out.

Response: Based on the Editor's suggestion, the language issues have been corrected carefully in the revised manuscript, and the sentences and grammar have been proofread detailedly by some native English speakers.