Atmos. Chem. Phys. Discuss., 9, C8617–C8619, 2009 www.atmos-chem-phys-discuss.net/9/C8617/2009/
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Interactive comment on "Heterogeneous ozonation kinetics of 4-phenoxyphenol in presence of photosensitizer" by S. Net et al.

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Received and published: 17 December 2009

We greatly appreciate the constructive comments of the anonymous reviewer. We have tried to take care of each comment appropriately. The following list contains our response to the reviewer's comments and a list of all corrections and changes which have been performed.

1) To check the possibility of 4-CB as a mediator in the reactions between ozone and 4-PP we performed the reaction between ozone and 4-PP in absence and in presence of 4-CB without light irradiation. No changes were observed in the degradation of 4-PP in both cases. The obtained results are now given in the supplementary electronic material (Figure 10S). 2) Experimental data points were fitted using simple first order exponential function. The errors bars represent the 1σ uncertainty levels based on the C8617

average of at least three repeated experiments. 3) The symbols in Figure 1 represent the various ozone mixing ratios. Now they are included in the legend of Figure 1. 4) This issue has been now discussed in the article

5) The errors bars represent the 1σ uncertainty levels based on the average of five repeated experiments. This is now included in Figure caption. 6) These two sections have been completely revised and now this discussion is depicted in five different sections as: 3.3 Single-component heterogeneous reactions 3.4 Modified Langmuir-Hinshelwood mechanism 3.5 Treatment of the kinetic data with the modified Langmuir-Hinshelwood mechanism 3.6 Langmuir-Hinshelwood mechanism for bimolecular surface reactions 3.7 Langmuir-Rideal mechanism for bimolecular surface reactions 7) Using the RSD on the scattering of the experimental data, the error on the slope k was calculated using the algorithm available in the Sigma Plot software.

Please also note the supplement to this comment: http://www.atmos-chem-phys-discuss.net/9/C8617/2009/acpd-9-C8617-2009-supplement.pdf

Interactive comment on Atmos. Chem. Phys. Discuss., 9, 21647, 2009.

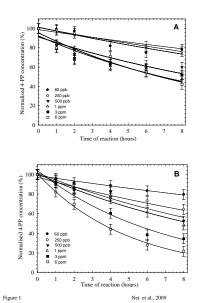


Fig. 1.

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