

Interactive comment on “Measurement-based modeling of daytime and nighttime oxidation of atmospheric mercury” by Maor Gabay et al.

Anonymous Referee #3

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Two basics:

1. The reaction $\text{Hg}^\circ + \text{NO}_3 \rightarrow \text{HgO} + \text{NO}_2$ is endothermic by 190 KJ/mol 2. The bonding energy of HgO is a mere 4 Kcal/mol (Shepler & Peterson, 2003, JPC)

dismissed the validity of this study. There is no point to go further with a study that calculates HgO as a product of GEM oxidation by NO₃. Peleg et al. (2015), the paper preceding the present one, should not have been published in the first place.

Interactive comment on Atmos. Chem. Phys. Discuss., doi:10.5194/acp-2017-39, 2017.