Atmos. Chem. Phys. Discuss., 8, S3301–S3302, 2008 www.atmos-chem-phys-discuss.net/8/S3301/2008/ © Author(s) 2008. This work is distributed under the Creative Commons Attribute 3.0 License.



ACPD

8, S3301–S3302, 2008

Interactive Comment

Interactive comment on "The heterogeneous OH oxidation of palmitic acid in single component and internally mixed aerosol particles: vaporization, secondary chemistry, and the role of particle phase" by V. F. McNeill et al.

T. Hoffmann (Editor)

hoffmant@uni-mainz.de

Received and published: 3 June 2008

The paper describes interesting results from laboratory experiments on the heterogeneous oxidation of palmitic acid (PA) on aqueous and effloresced inorganic salt particles. The PA/OH-system is used as a model system for oxidative chemical processing, degradation and chemical modification of organic particle phase constituents by atmospheric oxidants. Since this processes is expected to result in different alterations of the physical (volatility, light absorption, light scattering) and physico-chemical properties (water solubility, CCN-activity) of atmospheric aerosols, the work presented in



Interactive Discussion

Discussion Paper



this paper is certainly highly relevant and appropriate for publication in ACP. However, reviewer #1 raises the question about the formation (and possible photolysis) of hydroperoxides, which may dominate the chemistry of the investigated system but has not been included in the reaction mechanism, model or discussion. Since I follow the reviewers line of argumentation, I would encourage the authors to consider the reviewers suggestions, especially those made in comment 3 (incorporating/ discussing peroxy radical chemistry).

Interactive comment on Atmos. Chem. Phys. Discuss., 8, 6035, 2008.

ACPD

8, S3301–S3302, 2008

Interactive Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

