

## ***Interactive comment on “Amine exchange into ammonium bisulfate and ammonium nitrate nuclei” by B. R. Bzdek et al.***

**B. R. Bzdek et al.**

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We thank the reviewer for providing helpful comments. Our responses are given below:

1. The referee makes a valid point that salt formation is not the only way that amines can produce aerosol. In an effort to keep the manuscript concise, we chose to restrict the introduction to ambient and laboratory studies of amines themselves, rather than expanding to include oxidation reactions and products. We will insert a sentence in the revised manuscript that alerts the reader to the possibility of new particle formation via amine oxidation.

2. In this work, we focused on methyl amines because of their high levels in the atmosphere relative to other amines. Furthermore, we were interested in exploring the

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differences between primary, secondary and tertiary amines. Expanding the study to ethyl amines is desirable, but beyond the scope of an initial study.

3. We will make sure that the final manuscript is consistent – an italics K for the equilibrium constant, a normal K for temperature (Kelvin).

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Interactive comment on Atmos. Chem. Phys. Discuss., 10, 45, 2010.