Supporting Information for:

Effects of Water-soluble Organic Carbon on Aerosol pH

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Figure S1: AIOMFAC-modeled γ_{H+} (molality basis) and aerosol liquid water (ALW, polynomial fit to AIOMFAC output) versus organic dry mass fraction with the factorial addition of organic acid species for a) Baltimore and b) Beijing at 70% RH.



Figure S2: AIOMFAC-modeled γ_{H+} (molality basis) and aerosol liquid water (ALW, polynomial fit to AIOMFAC output) versus organic dry mass fraction with the factorial addition of non-acid organic species for a) Baltimore and b) Beijing at 70% RH.



Figure S3: AIOMFAC-modeled γ_{H+} (molality basis) and aerosol liquid water (ALW, polynomial fit to AIOMFAC output) versus organic dry mass fraction with the factorial addition of organic acid species for a) Baltimore and b) Beijing at 90% RH



Figure S4: AIOMFAC-modeled γ_{H+} (molality basis) and aerosol liquid water (ALW, polynomial fit to AIOMFAC output) versus organic dry mass fraction with the factorial addition of non-acid organic species for a) Baltimore and b) Beijing at 90% RH.



Figure S5: AIOMFAC-modeled aerosol pH (molality basis) versus organic dry mass fraction with the factorial addition of organic acid species for a) Baltimore and b) Beijing at 70% RH.



Figure S6: AIOMFAC-modeled aerosol pH (molality basis) versus organic dry mass fraction with the factorial addition of non-acid organic species for a) Baltimore and b) Beijing at 70%



Figure S7: AIOMFAC-modeled aerosol pH (molality basis) versus organic dry mass fraction with the factorial addition of organic acid species for a) Baltimore and b) Beijing at 90% RH.



Figure S8: AIOMFAC-modeled aerosol pH (molality basis) versus organic dry mass fraction with the factorial addition of non-acid organic species for a) Baltimore and b) Beijing at 90%