Supporting information for "Evaluation of the new capture vaporizer for Aerosol Mass Spectrometers (AMS) through laboratory studies of inorganic species"

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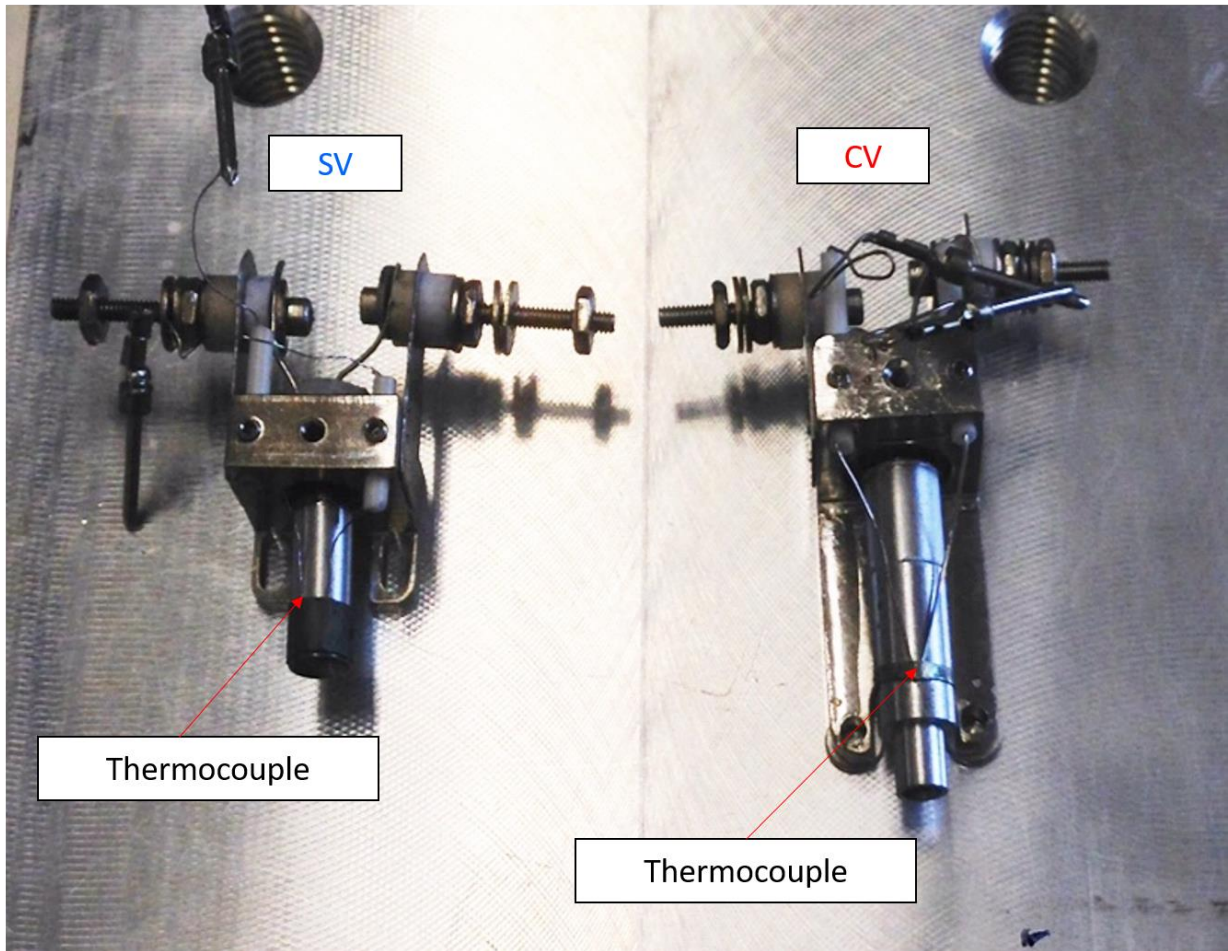
Figure S1. Picture of a standard vaporizer (SV, left) and a capture vaporizer (CV, right).
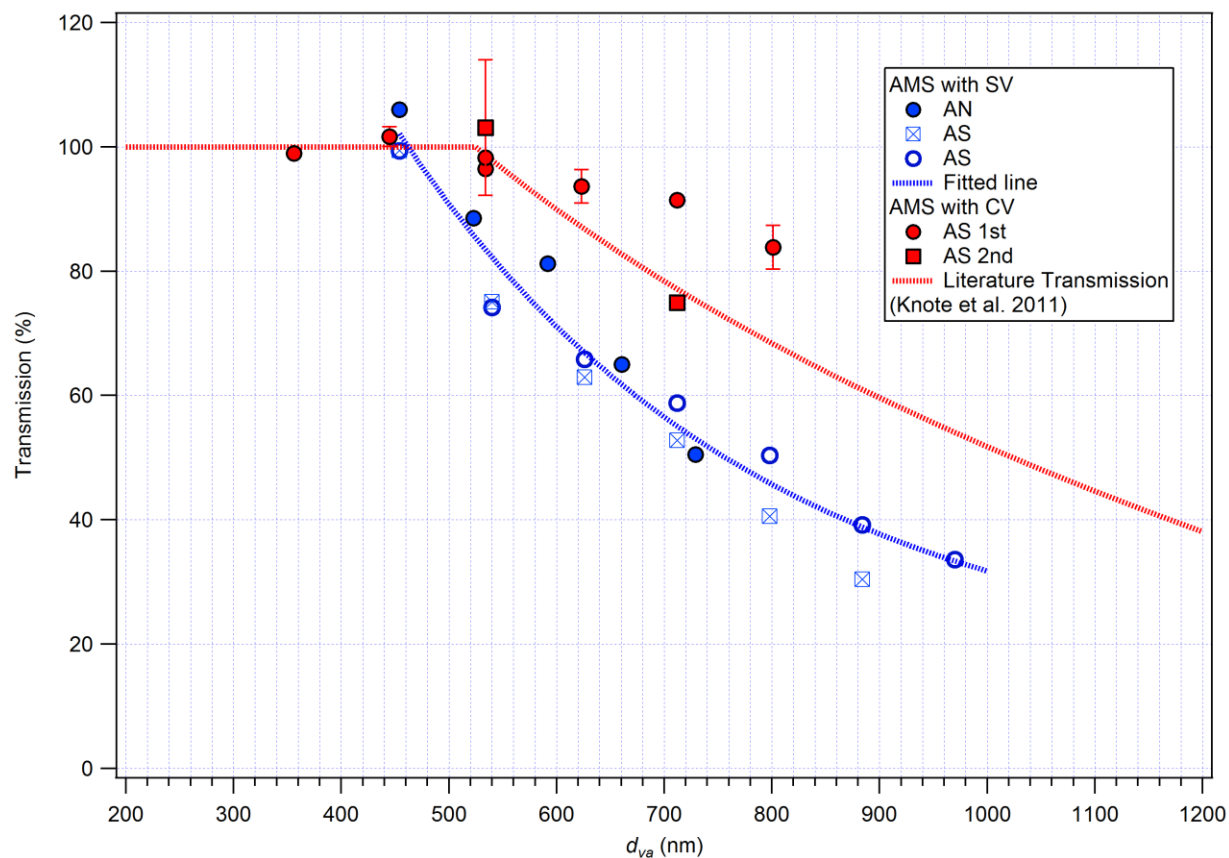
Figure S2. Lens transmission curve measured in this study for the AMSs with CV and SV. For d_{va} below 460 nm in SV AMS and 550 nm in CV AMS, no lens transmission correction was needed ($E_L=1$). In the experiments shown in this study, only $NaNO_3$ needs a transition loss correction for its high d_{va} (=680nm). During the experiment, an underperforming lens (that has since been replaced) was used in AMS with SV, thus showed a larger particle loss than the AMS with CV at high d_{va}. Normally, lens transmission curve is similar to that from CV AMS in this study, however individual AMS lens transmission calibrations are always recommended.