APPENDIX A. SUPPLEMENTARY MATERIAL

VOC Precursors Calibration Procedure

1. Calibration of 8 VOC precursors (α-pinene, d-limonene, isoprene, toluene, benzene, ethyl benzene, styrene and 1,3,5-trimethylbenzene (TMB)) was performed using Syntech spectras GC-PID GC955 series 600.

2. Using microliter syringes, a known amount of precursor was injected into Teflon Bag (Details mentioned in section Reactant injection of manuscript) filled with 7000L of purified air.

3. Corresponding area values of VOCs at specific concentration given by Syntech Spectras GC-PID GC955 were noted and calibration curve of area vs concentration was generated. The non-linear relationship between GC area and concentration might be due to saturation of adsorption column at high VOC concentration.

4. During the generation of each calibration curve, 4-5 values of areas at specific concentration were averaged which resulted in "Single Representative Data Point". Coefficient of Variation C_v is always < 0.5%.

5. For each VOC, calibration curves were generated 3 times to get a "Representative Calibration Curve".

6. "Single Representative Data Points" in a single curve were averaged to get "Averaged Single Representative Data Point" and C_v is always < 5%.

7. The "Representative Calibration Curve" for each VOC along with standard deviation is shown in Fig.S1.
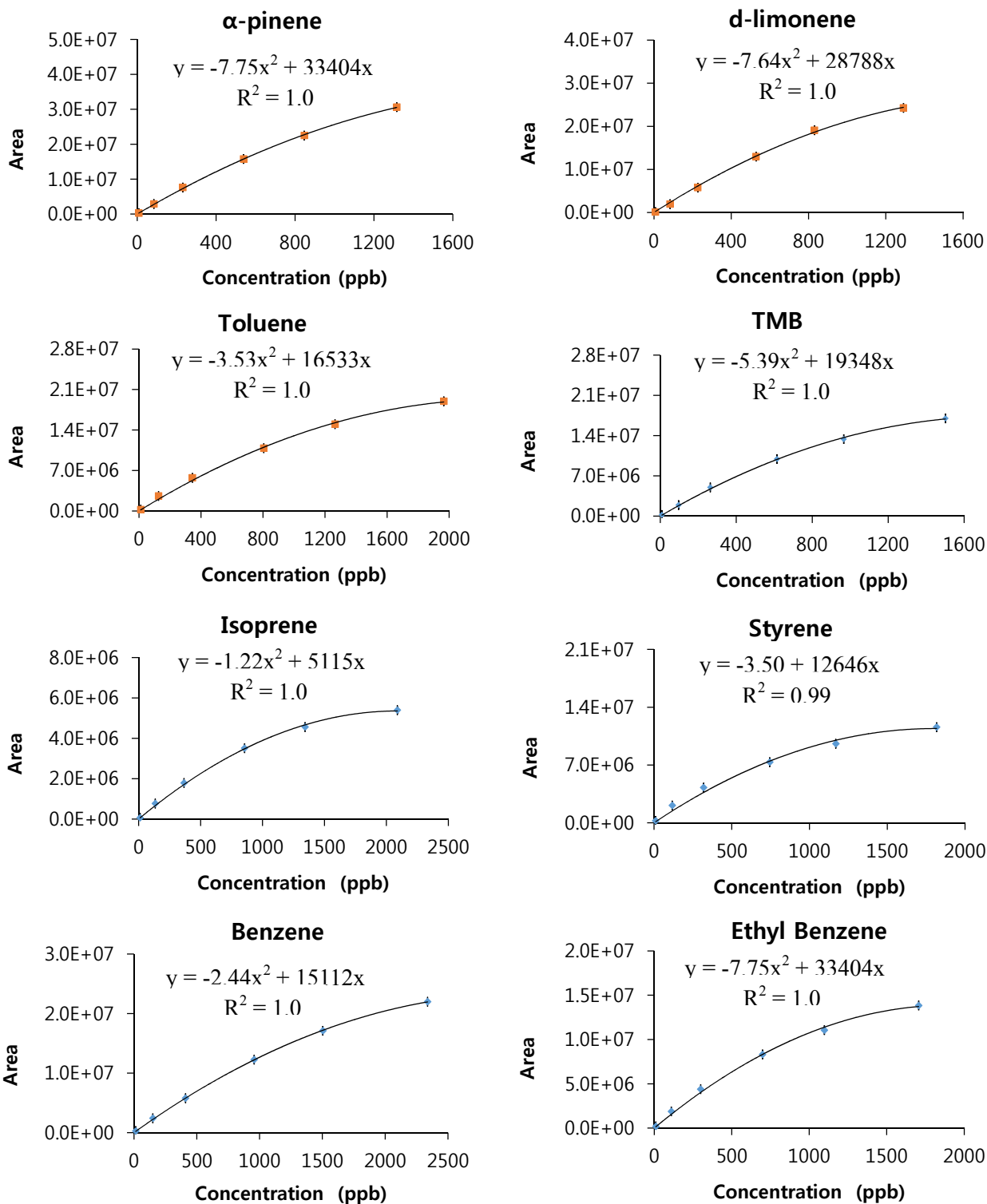
Fig. S1. Representative Calibration Curves for 8 VOCs of α-pinene, d-limonene, isoprene, toluene, benzene, ethyl benzene, styrene, and 1,3,5-trimethylbenzene (TMB).