

Supplementary Materials

Comparative Analysis of Secondary Organic Aerosol Formation during PM_{2.5} Pollution and Complex Pollution of PM_{2.5} and O₃ in Chengdu, China

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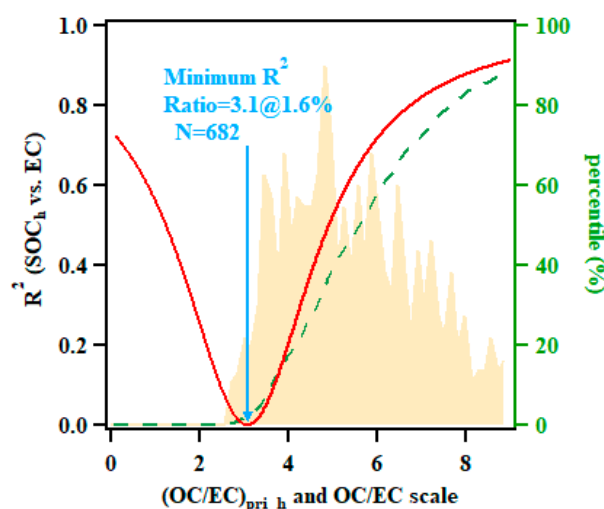


Figure S1. Illustration of the use of the minimum R^2 method (MRS) to obtain $(OC/EC)_{pri}$. The red curve indicates the correlation coefficient (R^2) between SOC and EC as a function of the assumed $(OC/EC)_{pri}$. The shaded area shows the frequency distribution of the OC/EC ratio. The green dashed curve represents the cumulative frequency of the OC/EC ratio.

Table S1. SOA yields of VOC photochemical reaction in this study.

Species	Yield ¹	Yield _{corr} ²	Species	Yield ¹	Yield _{corr} ²
Alkanes			Aromatics		
2,4-dimethylpentane	0.009	0.010	benzene	0.163	0.204
2,3-dimethylpentane	0.009	0.010	toluene	0.092	0.386
3-methylhexane	0.009	0.010	ethylbenzene	0.053	0.064
2,2,4-trimethylpentane	0.041	0.048	m/p-xylene	0.053	0.064
n-heptane	0.009	0.010	styrene	0.053	0.064
2,3,4-trimethylpentane	0.041	0.048	o-xylene	0.053	0.064
methylcyclohexane	0.121	0.140	isopropylbenzene	0.053	0.064
2-methylheptane	0.041	0.048	n-propylbenzene	0.053	0.064
3-methylheptane	0.041	0.048	m-ethyltoluene	0.053	0.064
n-octane	0.041	0.048	p-ethyltoluene	0.053	0.064

n-nonane	0.080	0.093	1,3,5-trimethylbenzene	0.053	0.064
n-decane	0.146	0.169	o-ethyltoluene	0.053	0.064
n-undecane	0.270	0.313	1,2,4-trimethylbenzene	0.053	0.064
n-dodecane	0.348	0.404	1,2,3-trimethylbenzene	0.053	0.064
methylcyclopentane	0.040	0.046	m-diethylbenzene	0.053	0.064
cyclohexane	0.040	0.046	p-diethylbenzene	0.053	0.064
2-methylhexane	0.009	0.010			

¹Yields are from Lim and Ziemann [1], Ng et al. [2] and Wang et al. [3].

²Yields were corrected by vapor loss biases (R_{wall}) from Zhang et al. [4]. The R_{wall} was 1.16 for all alkanes and 4.2 for toluene adopts 4.2, where the R_{wall} for toluene was lower than that of Wang et al. [3].

References

References must be numbered in order of appearance in the text (including citations in tables and legends) and listed individually at the end of the manuscript. We recommend preparing the references with a bibliography software package, such as EndNote, ReferenceManager or Zotero to avoid typing mistakes and duplicated references. Include the digital object identifier (DOI) for all references where available.

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