Chemical Compositions and Source Analysis of PM2.5 during Autumn and Winter in a Heavily Polluted City in China

Shasha Tian [1], Yingying Liu [1], Jing Wang [1], Jian Wang [1], Lujian Hou [2], Bo Lv [2], Xinhua Wang [1], Xueyan Zhao [1], Wen Yang [1], Chunmei Geng [1,*], Bin Han [1,*] and Zhipeng Bai [1]

[1] State Key Laboratory of Environmental Criteria and Risk Assessment, Chinese Research Academy of Environmental Sciences, Beijing 100012, China; tianss1020@163.com (S.T.); liuyy@craes.org.cn (Y.L.); wangjing@craes.org.cn (J.W.); wangjian@craes.org.cn (J.W.); wangxh@craes.org.cn (X.W.); zhaoxy@craes.org.cn (X.Z.); yangwen@craes.org.cn (W.Y.); baizp@craes.org.cn (Z.B.)

[2] Jinan Environmental Monitoring Center Station, Jinan 250000, China; houlujian@vip.sina.com; lvbo0531@163.com

* Correspondence: gengcm@craes.org.cn (G.G.); Tel.: +86-10-849-15246; hanbin@craes.org.cn (B.H.), Tel: +86-10-8493-5950.

Table S1 Concentrations of $PM_{2.5}$ from Jinan and other cities.

Location	Period	Filter type	Sampling equipment	$PM_{2.5}$(μg/m^3)
Jinan	October - January 31, 2018	Teflon filters	small-flow particulate matter sampler	83.54
Lanzhou [1]	December in 2012	Quartz filters	High volume air sampler	120.5
Xi'an [2]	November – March 2006	Quartz filters	Battery-powered mini-volume samplers	Winter:266.8
Beijing [3]	October – November 2016	Quartz filters	Four-channel Spiral Ambient Speciation Sampler	95.47
Jinan [4]	March 2006 – February 2007	Teflon filters	Thermo Anderson Chemical Speciation Monitor	Autumn:134.9
Nanjing [5]	October 2013 – November 2014	-	RCFP-IC an on-line analyzer	Autumn:63.72

Table S2 Concentrations of $PM_{2.5}$ and major compositions from Jinan and other cities (μg/m^3).

Location	Period	Sampler	Mass concentrations (μg/m^3)						
			$PM_{2.5}$	SO_4^{2-}	NO_3^-	NH_4^+	OC	EC	OC/EC
Xinjiang [6]	December. in 2015	High-volume	95.47	33.63	17.97	15.32	8.76	1.37	6.39
Shanghai [7]	October - November 2013	High-volume	75.2	12.9	15.0	6.64	7.00	0.99	7.07
Chongqing [8]	May 2012 - May 2013	Four-channel sampler	68.0	15.4	8.4	6.9	-	3.5	-
Chengdu [9]	January. in 2011	low-flow air sampler	158	31.8	15.5	15.3	22	8	2.7
Tangshan [10]	May 2013 - April 2015	-	-	-	-	-	11.73	5.06	2.32
Lanzhou[11]	January - December 2014	Mid-volume	141.1	7.6	10.1	6.0	30.3	13.4	2.3

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