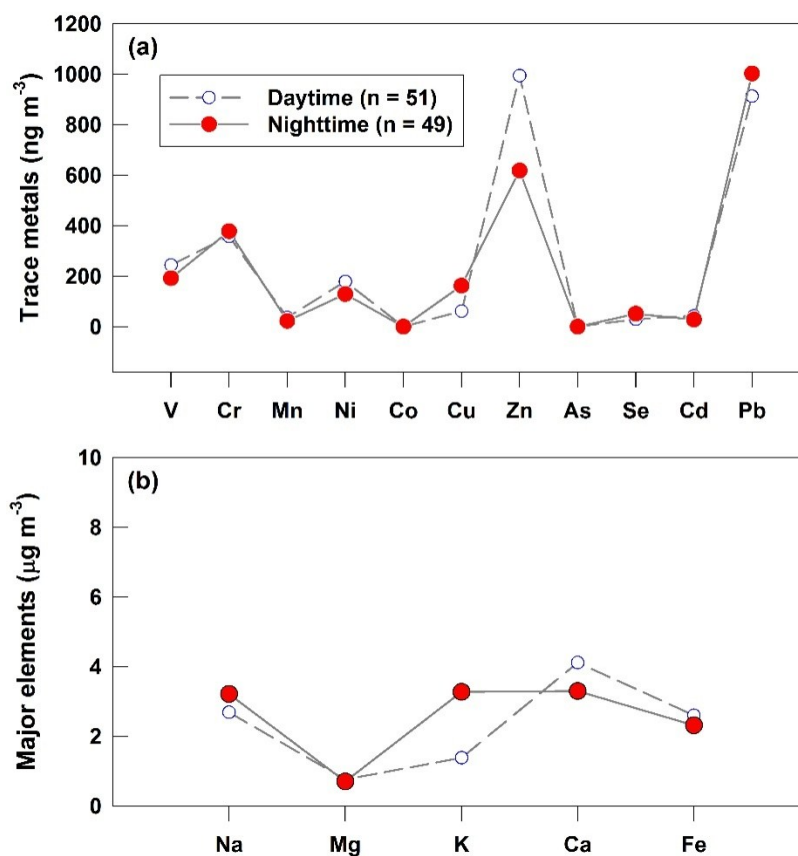


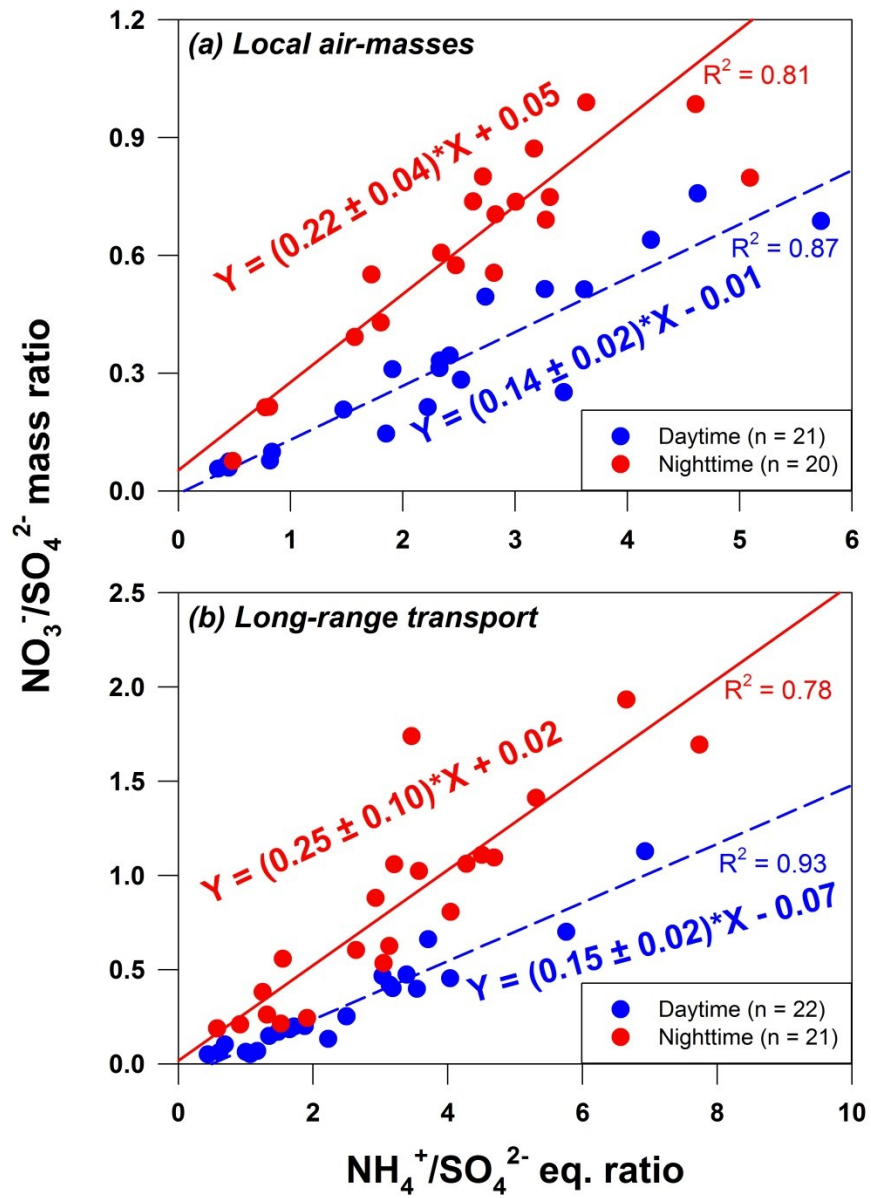
## Supplementary File

(Rajput et al., 2016\_RSC Advances)



4

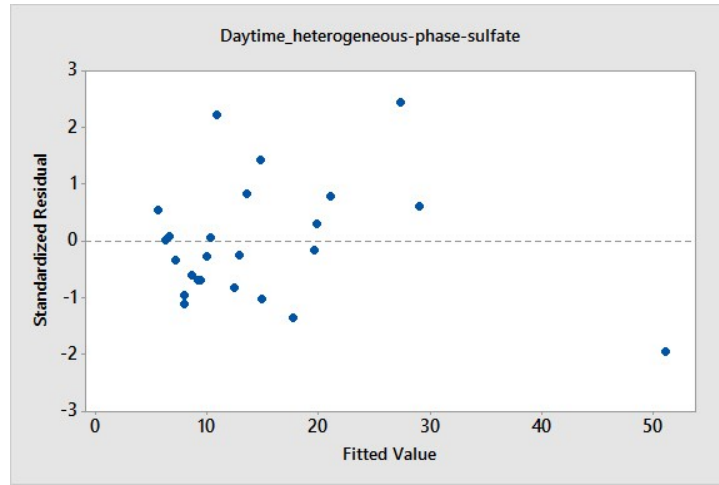
5 **Fig. S1** Temporal variability records of: (a) trace metals and (b) major elements in PM<sub>1</sub> at study  
6 location (Kanpur).



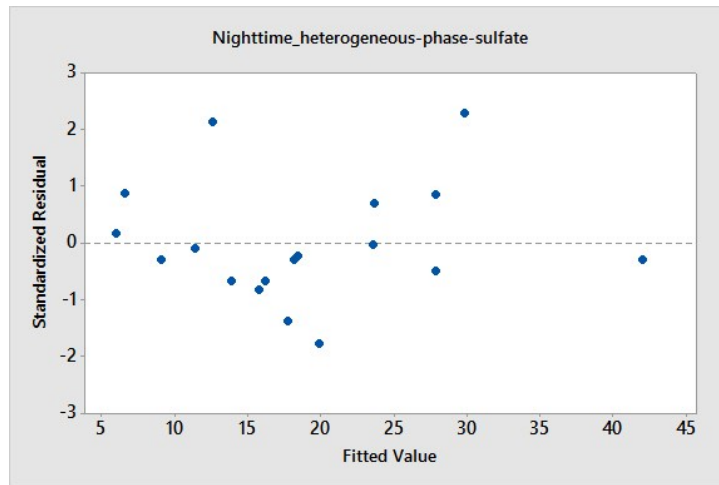
7

8 **Fig. S2** Scatter plot showing excess (xs)- $\text{NH}_4^+$  correlates with enhanced formation of  $\text{NO}_3^-$  both  
 9 during day and nighttime.

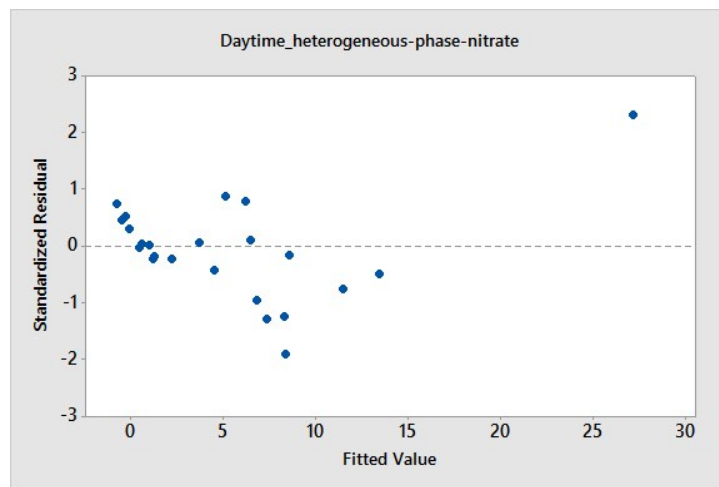
10 **Residual analysis for heterogeneous-phase formation of sulfate and nitrate:**



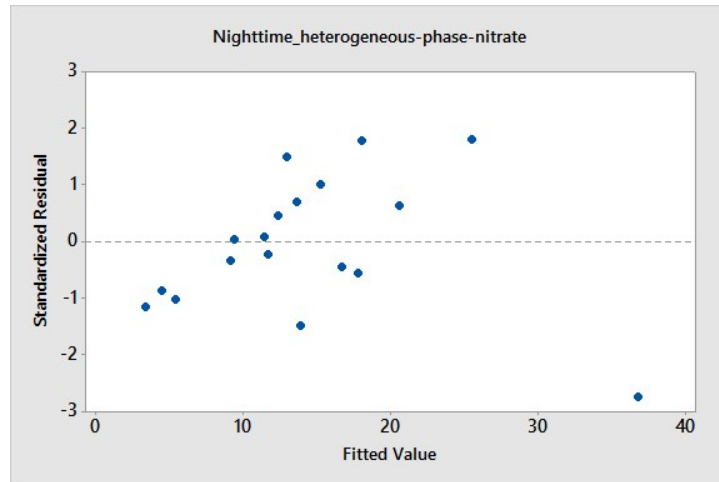
11



12



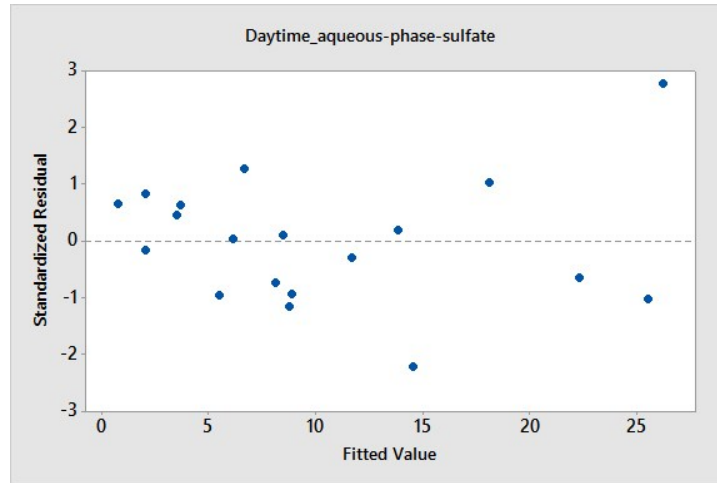
13



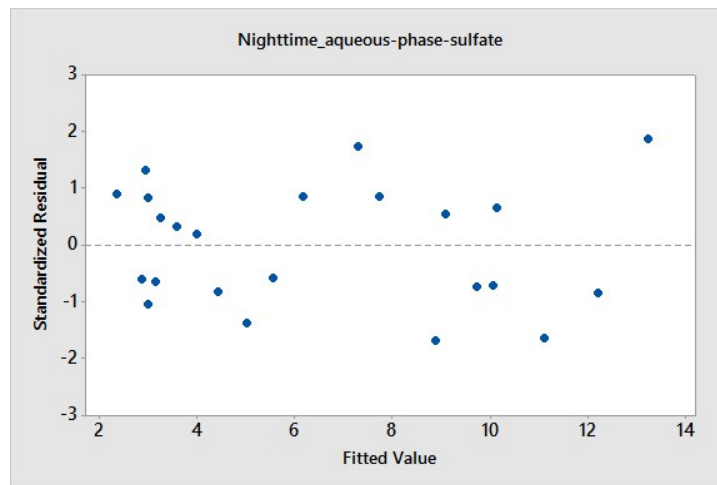
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15 **Fig. S3** Residual analyses for heterogeneous-phase formation of sulfate and nitrate in  $PM_{10}$  at  
16 Kanpur (IGP).

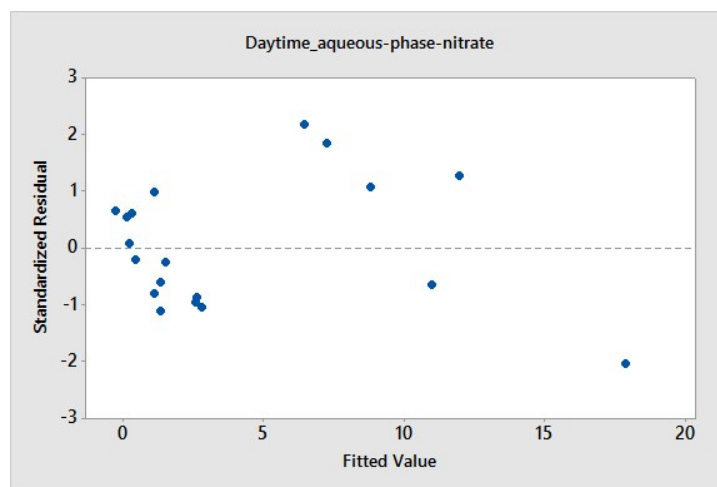
17 **Residual analysis for aqueous-phase formation of sulfate and nitrate:**



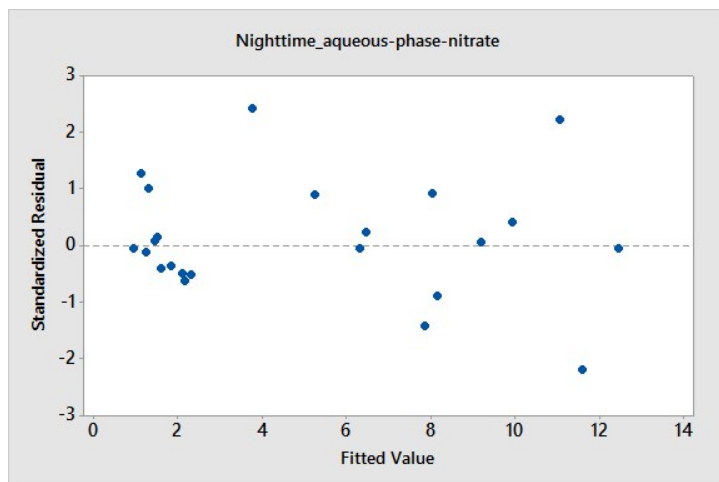
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21

22 **Fig. S4** Residual analyses for aqueous-phase formation of sulfate and nitrate in PM<sub>1</sub> at Kanpur

23 (IGP)