

Interactive comment on “Determination of n-alkanes, PAHs and hopanes in atmospheric aerosol: evaluation and comparison of thermal desorption GC-MS and solvent extraction GC-MS approaches” by Meng Wang et al.

Anonymous Referee #3

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The study presented in the manuscript described the comparison of two analytical method for the quantification of n-alkanes, PAHs and hopanes in atmospheric aerosol. The authors evaluated compared TD-GC/MS method with SE-GC/MS method in terms of their analytical performance and discussed their advantages/disadvantages.

The manuscript is well written but the scientific interest in comparing these two analytical methods is limited. Indeed, the study does not provide any new analytical technique and finally only the measured concentrations of particle organic compounds for samples collected in China, provide an interest to the organic aerosol community.

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It would be necessary to improve the quality of the manuscript more discuss about the difference in aerosol sources and processes in four megacities, increase the number of sample (compare different season), interpret the data according to the meteorological parameters to the sample sites, ...

The solvent extract method (SE) is not enough developing to make a comparison with the thermal desorption method. For example, other extraction method could have been tested : Soxhlet extraction or/and ASE method ; different solvent mixture (acetonitrile, ...),...

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