

# ***Interactive comment on “Source apportionment of fine particulate matter in Houston, Texas: Insights to secondary organic aerosols” by Ibrahim M. Al-Naiema et al.***

**Ibrahim M. Al-Naiema et al.**

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Dear Alexandre,

Thank you for your feedback on this manuscript. We greatly appreciate your interest and suggestions to improve it. We agree that these papers are relevant to the work presented herein and have added reference to them in three places:

In the introduction, when describing the value of molecular-marker driven PMF for apportionment of SOA: “This approach has been particularly useful in the elucidation of SOA contributions to ambient PM, by providing insight into the precursors and path-

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ways by which they form (Hettiyadura et al., 2018; Srivastava et al., 2018; Wang et al., 2017).”

In our recommendations for expanding tracers for PAH-derived SOA: “In prior MM-PMF studies in France, oxy-PAH and nitro-PAH have been useful in tracing SOA derived from larger PAH (Srivastava et al., 2018a, 2018b). ”

In our recommendations for better constraining BB SOA: “Phenolic oxidation associated with BB SOA has also been identified using methyl-nitrocatechols (Srivastava et al., 2018a, 2018b).”

Thank you, Betsy

#### Works Cited

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