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Addition/Correction

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# Correction to Characterization of Particulate Matter Emissions from a Current Technology Natural Gas Engine

Arvind Thiruvengadam,* Marc C. Besch, Seungju Yoon, John Collins, Hemanth Kappanna, Daniel K Carder, Alberto Ayala, Jorn Herner, and Mridul Gautam

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Figure 4 shows the mass fraction of EC, OC and lubrication oil derived elements in the PM sample. Due to a calculation error,

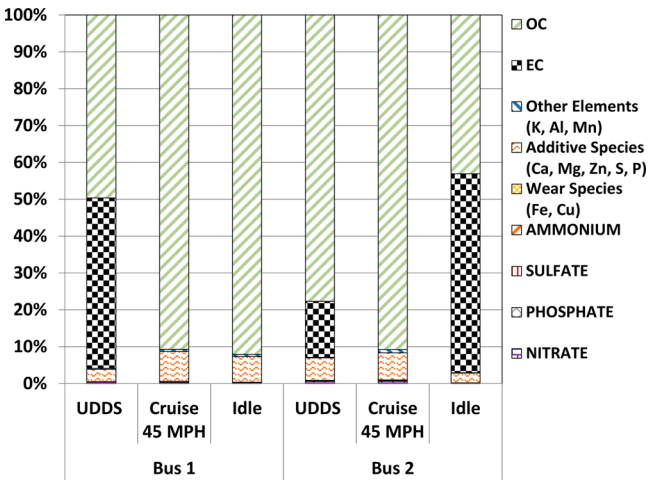


**Figure 4.** Corrected figure for mass fraction of different chemical species analyzed in the PM samples.

the figure showed a high mass fraction of lubrication oil derived elements and metals. Figure 4 of this erratum shows the corrected mass fraction of PM after the calculation error was addressed. The corrections of the error results in the conclusion that the mass fraction of lubrication oil derived elements and metals are less than 10% of total mass of PM.

The comparison of distance-specific emissions of lubrication-oil-derived elements from this study with previous SCR-equipped diesel work presented by Hu et al. is discussed in Line 2, second column of page 8239 of the original manuscript. The original manuscript suggested that the distance-specific emissions of lubrication-oil-derived elements are an order of magnitude higher from TWC-equipped natural gas vehicles compared to DPF-SCR-equipped diesel over the UDDS driving cycle. As a result of the correction to the calculation, the results now conclude that the distance-specific emissions of lubrication-oil-derived elements from TWC-equipped natural gas engines are up to 2 times higher than the retrofit DPF-SCR equipped diesel engines.[1]

The overall conclusions of the study remain unchanged after the correction of the error. The original manuscript suggests the possibility of lubrication oil-derived elements from TWC-equipped natural gas engines to contribute more toward particle number count in the 10 nm size range. The manuscript also suggests that renucleation of inorganic lubrication oil additives, passing through the combustion chamber of the engine to be the primary contributor to particle number count in this size range.[2,3]

## REFERENCES

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